



May 5, 2005

The Honorable Board of Supervisors  
County of Los Angeles  
383 Kenneth Hahn Hall of Administration  
500 West Temple Street  
Los Angeles, CA 90012

Dear Supervisors:

**ADOPTION OF NEW RETIREMENT CONTRIBUTION RATES  
(3 VOTES )**

**IT IS RECOMMENDED THAT YOUR BOARD:**

Adopt revised employer contribution rates approved by the Board of Investments of the Los Angeles County Employees Retirement Association (LACERA) effective July 1, 2005. Adoption will result in an aggregate employer contribution rate of 16.01% increasing annual employer retirement contributions by \$74 million.

**PURPOSE OF RECOMMENDED ACTION:**

Set employer and employee contribution rates at a level sufficient to fund plan liabilities identified in the 2004 Actuarial Valuation Report.

**JUSTIFICATION:**

The June 4, 2002 agreement with the Los Angeles County Employees Retirement Association (LACERA) amending the 1994 Retirement System Funding Agreement between the County and LACERA requires, among other things, that "commencing with the Interim Actuarial Valuation as of June 30, 2002, and in each annual Actuarial Valuation conducted thereafter to and including the valuation as of June 30, 2008...if there is any Unfunded Actuarial Accrued Liability (UAAL), the County shall, commencing July 1 of the immediately succeeding Fiscal Year, make annual contributions to LACERA as determined by LACERA's actuary to discharge said UAAL over a rolling thirty (30) year amortization schedule."

The County Employees Retirement Law requires the Board of Investments to obtain an actuarial valuation of the system at intervals not to exceed three (3) years, and on the basis of such valuation to recommend to Board of

Supervisors, at least 45 days prior to the beginning of the succeeding fiscal-year, such changes in employer and/or member contributions rates as may be necessary to properly fund the system. The Board of Supervisors is required to adopt the contribution rates approved by the Board of Investments no later than ninety (90) days following the beginning of the immediately succeeding fiscal year. However, this ninety (90) day approval period has been accelerated by the June 4, 2002 amendment to the 1994 Retirement System Funding Agreement, and as such, the Board of Supervisors is required to adopt the contribution rates approved by the Board of Investments effective July 1, 2005. The LACERA Board of Investments approved the revised employer rates recommended in the 2004 Actuarial Valuation on April 13, 2005.

### **IMPLEMENTATION OF STRATEGIC GOAL PLANS**

The adoption of the revised employer contribution rates provided for in the recommendation are directly responsive to the Strategic Plan goal of fiscal responsibility.

### **FISCAL IMPACT/FINANCING:**

Increases County contributions for Fiscal Year 2005-06 by an estimated \$74 million resulting in an annual County retirement cost estimated at \$822 million. Member contribution rates, which are specific to the plan and the member's entry age, will vary less than 1% from the current member contribution rates that were adopted in 2002.

### **FINANCING:**

General Fund Obligation

### **FACTS AND PROVISIONS/LEGAL REQUIREMENTS:**

#### **1. LEGAL REQUIREMENT FOR PERIODIC ACTUARIAL VALUATIONS AND ADJUSTMENTS IN CONTRIBUTION RATES**

Provisions contained in Article XVI, Section 17 of the California Constitution and in the County Employees Retirement Law of 1937 (California Government Code, Sections 31450 - 31899.10) govern the actuarial process at LACERA.

The California Constitution assigns "the sole and exclusive power to provide for actuarial services "to the governing body of the public retirement system. Such

power is granted by the Constitution "in order to assure the competency of the assets of the public pension or retirement system."

Section 31453 of the County Employees Retirement Law requires LACERA to obtain an actuarial valuation at least once every three years and on the basis of such valuation, to recommend to the Board of Supervisors, at least 45 days prior to the beginning of the succeeding fiscal year, such changes in employer and/or member contributions rates as may be necessary to properly fund the retirement system.

Section 31454 requires the Board of Supervisors to adjust contribution rates in accordance with LACERA's recommendations not later than 90 days following the beginning of the immediately succeeding fiscal year. However, this ninety (90) day approval period has been accelerated by the June 4, 2002 amendment to the 1994 Retirement System Funding Agreement, and as such, the Board of Supervisors is required to adopt the contribution rates approved by the Board of Investments effective July 1, of the immediately succeeding Fiscal Year.

Section 31454.1 exempts the independent assumptions and calculations of LACERA's actuary from "meet and confer" requirements while recognizing the "meet and confer" responsibility of the Board of Supervisors in implementing the recommendations contained in the actuarial valuation.

## 2. THE ACTUARIAL VALUATION PROCESS

Actuarial valuations are performed in order to determine the cost of a retirement program. The cost of a defined benefit retirement program such as the one administered by LACERA consists of two (2) components, normal cost and unfunded liability. Normal cost is the amount needed to fund the service currently being earned by retirement system members through their current employment with the County. The unfunded liability represents liabilities created by past service, which have not been funded by previously collected contributions.

The cost of a retirement program is determined by a number of economic and non-economic factors such as the rate of return on assets, the rate of future salary increases, inflation, mortality, disability, and membership terminations. The actuary must make assumptions concerning the long range impact of these cost factors in determining the amount of assets required to fund the cost of the retirement program.

There are three sources of revenue for underwriting the cost of a retirement plan, member contributions, employer contributions and investment earnings. As part of the valuation process, the actuary estimates the amount of future

benefit payments that will be funded through investment return. After projecting the extent to which benefit payments will be funded through investment earnings, the actuary then calculates the amount of employer and member contributions needed to complete the full funding of the retirement program.

### 3. ACTUARIAL AUDIT

In order to validate the accuracy of the valuations used to calculate contribution rates, the Board of Investments authorized an independent actuarial audit of the services performed by LACERA's consulting actuary, Milliman Inc. The audit of the June 30, 2004 valuation report found the work performed by Milliman Inc. to be reasonable and based on generally accepted actuarial principles and practices. The auditing actuary found no financially significant actuarial issues to report. Actuarial Audits are to be performed in the same cycle as the triennial investigation and experience study, and as such, the next actuarial audit will be performed on the June 30, 2007 triennial valuation and investigation.

### 4. RESULTS OF THE 2004 VALUATION

According to Milliman Inc's 2004 valuation, the actuarial value of valuation reserves amounted to \$27.1 billion and the actuarial accrued liability amounted to \$32.7 billion. As a result, LACERA continues to be well funded with a funding ratio of 82.8%.

The key factors in arriving at this result can be summarized as follows:

- ; \$770 million increase in liabilities due to benefit accruals;
- ; \$697 million increase in liabilities due to resetting assumptions,
- ; \$179 million net actuarial gain from non-economic plan experience differing from plan assumptions; and
- ; \$871 million net actuarial loss due to the assets of the plan performing below the expected actuarial rate of return; and

The LACERA actuary reported to the Board of Investments at their April 13, 2005 meeting that the actuarial asset smoothing method is dampening the contribution rate volatility by smoothing investment gains and losses. The 2004 actuarial valuation fully reflects the market losses suffered in fiscal years 2001 and 2002, and reflects two-thirds of the 2003 market losses. This is a significant contributing factor to the increase in the employer contribution rate. Fortunately, strong investment returns in 2004 will offset the remaining 2003 market losses in the next valuation.

The amended Retirement System Funding Agreement requires the recognition of the STAR Program reserve as valuation assets to the extent that it is not needed for STAR Program payments during the term of the Agreement and that the amount recognized can only be used to bring the funded status of the plan up to 100%. At the completion of the June 2008 valuation, the STAR Reserve will no longer be considered as an actuarial valuation asset in this manner. Had the STAR Reserve been excluded from the actuarial value of assets as of June 30, 2004, the funding ratio would have decreased an additional 1.6% and the County contribution rate would have increased from the 16.01% recommended rate to 16.80%.

Plan demographics reported in the valuation indicate 1.7% decrease in the size of the active member population with an increase in the overall average age to 44.9. Ninety percent of active participants are members of the open tiers with only 7% of our members continuing to be covered by one of the closed plans. The retired population increased by 2.3% and now totals over 48,000. The average benefit payment increased by 5.1% to almost \$2,645 per month. The average age of the retired population increased by approximately one month to 70.5.

#### **IMPACT ON CURRENT SERVICES:**

As previously stated, LACERA is funded by both member and employer contributions. Member normal contributions are defined in the County Employees Retirement Law as those required to fund a specific annuity at a specified age. Members' normal contribution rates are not impacted by actuarial gains and losses but are affected by changes made in the interest, salary and mortality assumptions. The County Employees Retirement Law also requires members to pay half the contributions required to fund the cost-of-living benefit. Unlike normal contributions, cost-of-living contributions are affected by changes in any of the economic and non-economic assumptions. As there have been changes in actuarial assumptions, the actuary is recommending changes in the member contribution rates at this time.

Liabilities not funded through the member contribution rates are the responsibility of the employer. Changes in any of the economic and non-economic assumptions impact employer contribution rates. The employer is responsible for contributing the cost of benefits expected to be accrued in the future and half of the cost-of-living benefit. These contributions are known as the normal cost contributions. The employer is also responsible for contributing the cost for funding the liabilities that have accrued in the past. This portion of the employer's contribution rate is known as the unfunded liability contribution.

Under the terms of the amended 1994 Retirement System Funding Agreement, contributions to retire the unfunded liability are required using a thirty year rolling amortization period should the Association's funding ratio drop below 100%. Since the 2004 valuation determined the funding ratio to be 82.7%, the County is required to make an unfunded liability contributions in Fiscal Year 2005/2006 in the amount of 6.41% of active payroll.

Additionally, the actuary has recommended new employer contribution rates for the normal cost. The overall normal cost contribution rate has decreased from 9.99% to 9.60%. Applying the new 9.60% normal cost contribution rate and the 6.41% unfunded liability contribution rate to the February 2005 payroll, the monthly contributions owed by the County increases by approximately \$6 million per month. The attachment titled "Employer Contribution Cost Analysis" details the impact of this proposed change by plan type on a monthly and annualized basis.

It should be noted that the County Contribution Credit Reserve Account currently amounting to \$334 million, as of March 31, 2005, has not been affected by these changes. These funds remain available for the County to use in meeting its future pension costs.

**CONCLUSION:**

LACERA continues to be well-funded public retirement system. LACERA remains well positioned to fulfill all of its obligations to its members and beneficiaries.

Respectfully submitted,

MARSHA D. RICHTER  
Chief Executive Officer

MDR:GR:lls  
Actval04bofs.doc

**Attachments**

c: Chief Administrative Officer  
Executive Officer, Board of Supervisors  
Board of Investments  
Board of Retirement

LACERA  
Employer Contribution Cost Analysis

	General A	General B	C	D	E	Safety A	Safety B	Monthly Total	Annualized Total
Expected Monthly Contributions									
Using New Rates	\$5,488,126	\$340,795	\$236,485	\$25,470,019	\$18,777,040	\$2,070,203	\$16,095,899	\$68,478,566	\$821,742,795
Using Old Rates as of July 1, 2004	5,107,963	306,551	211,601	22,735,343	16,221,895	1,964,095	15,776,293	62,323,741	747,884,886
<b>Monthly Contribution Impact</b>	<b>\$380,163</b>	<b>\$34,244</b>	<b>\$24,884</b>	<b>\$2,734,676</b>	<b>\$2,555,145</b>	<b>\$106,108</b>	<b>\$319,606</b>	<b>\$6,154,826</b>	<b>\$73,857,908</b>

New Rates  
Rates from June 30, 2004 Actuarial Report

	General A	General B	C	D	E	Safety A	Safety B
Basic Normal Cost	9.60%	6.55%	6.34%	6.54%	6.66%	14.18%	11.69%
COL Normal Cost	4.79%	1.57%	1.41%	1.30%	1.26%	7.46%	2.59%
UAAL	6.41%	6.41%	6.41%	6.41%	6.41%	6.41%	6.41%
<i>Surcharge (Based on Prior Year for Comparison Purposes)</i>	<i>0.71%</i>					<i>0.24%</i>	<i>2.98%</i>
	21.51%	14.53%	14.16%	14.25%	14.33%	28.29%	23.67%

Old Rates Effective July 1, 2004  
Rates from June 30, 2003 Actuarial Report

	General A	General B	C	D	E	Safety A	Safety B
Basic Normal Cost	9.69%	6.78%	6.57%	6.67%	7.72%	14.93%	13.15%
COL Normal Cost	4.96%	1.63%	1.44%	1.39%	0.00%	7.01%	2.41%
UAAL	4.66%	4.66%	4.66%	4.66%	4.66%	4.66%	4.66%
<i>Surcharge</i>	<i>0.71%</i>					<i>0.24%</i>	<i>2.98%</i>
	20.02%	13.07%	12.67%	12.72%	12.38%	26.84%	23.20%
<i>Difference</i>	<i>1.49%</i>	<i>1.46%</i>	<i>1.49%</i>	<i>1.53%</i>	<i>1.95%</i>	<i>1.45%</i>	<i>0.47%</i>

Payroll Data  
(Excludes LACERA)

	General A	General B	C	D	E	Safety A	Safety B	Total
Feb-05	\$25,514,299	\$2,345,458	\$1,670,091	\$178,736,977	\$131,033,075	\$7,317,789	\$68,001,264	\$414,618,953

**Los Angeles County Employees  
Retirement Association**

**ACTUARIAL VALUATION  
June 30, 2004**



By

Karen I. Steffen

Fellow, Society of Actuaries  
Member, American Academy of Actuaries

and

Nick J. Collier

Associate, Society of Actuaries  
Member, American Academy of Actuaries





**Milliman**

*Consultants and Actuaries*

1301 Fifth Avenue, Suite 3800  
Seattle, WA 98101-2605  
Tel +1 206 624.7940  
Fax +1 206 623.3485  
www.milliman.com

April 13, 2005

Board of Investments  
Los Angeles County Employees Retirement Association  
300 North Lake Avenue, Suite 820  
Pasadena, CA 91101-4199

Dear Members of the Board:

As requested, we have made an actuarial valuation of the Los Angeles County Employees Retirement Association (LACERA). The major findings of the valuation are contained in this report. This report reflects the benefit provisions and contribution rates in effect as of June 30, 2004, and both the Interim Funding Policy and the Retirement Benefit Enhancement Agreement. In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the LACERA's staff. This information includes, but is not limited to, statutory provisions, employee data and financial information. In our examination of these data, we have found them to be reasonably consistent and comparable with data used for other purposes. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board (ASB) and the Code of Professional Conduct and Qualification Standards for Public Statements of Actuarial Opinion of the American Academy of Actuaries.

We further certify that all costs, liabilities, rates of interest, and other factors for LACERA have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of LACERA and reasonable expectations) and which, in combination, offer our best estimate of anticipated experience affecting LACERA. Nevertheless, the emerging costs will vary from those presented in this report to the extent that actual experience differs from that projected by the actuarial assumptions. The Board of Investments has the final decision regarding the appropriateness of the assumptions and adopted them as indicated in Appendix A.

Actuarial computations presented in this report are for purposes of determining the recommended funding amounts for LACERA. Actuarial computations under GASB Statement No. 25 are for purposes of fulfilling financial accounting requirements. The computations prepared for this purpose may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of LACERA's funding requirements as stated under their Interim Funding Policy, the Retirement Benefit Enhancement Agreement, and of GASB Statement No. 25. Determinations for purposes other than meeting these requirements may be significantly



Board of Investments  
Los Angeles County Employees Retirement Association  
April 13, 2005  
Page Two

different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

This information is for the exclusive use of the Los Angeles Employees Retirement Association (LACERA) for the purposes stated herein. The information provided may not be appropriate for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

We would like to express our appreciation to Ms. Marsha Richter, Chief Executive Officer of LACERA, and to members of her staff, who gave substantial assistance in supplying the data on which this report is based.

I, Karen I. Steffen, am a member of the American Academy of Actuaries and a Fellow of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

I, Nick J. Collier, am a member of the American Academy of Actuaries and an Associate of the Society of Actuaries, and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

We respectfully submit the following report, and we look forward to discussing it with you.

Sincerely,

Karen I. Steffen, FSA, EA, MAAA  
Consulting Actuary

Nick J. Collier, ASA, EA, MAAA  
Consulting Actuary

KIS/NJC/nlo

**Los Angeles County Employees  
Retirement Association**

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**Los Angeles County Employees  
Retirement Association**

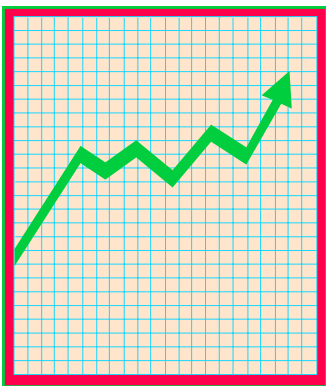
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# Los Angeles County Employees Retirement Association

## Section 1: Summary of the Findings

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### Overview

### 2004 Valuation Results

We are pleased to present the results of the June 30, 2004 actuarial valuation. Several key points are summarized as follows:

- **Investment Returns:** LACERA, like almost every other retirement system, has been impacted by poor investment markets in the early years of this decade. As was the case last year, these losses had a significant effect on the funding of the system.

For the fiscal year ending in 2004, the fund returned over 16% on a market basis. This gain was more than offset by the recognition of losses deferred from 2002 and 2003 resulting in an \$871 million loss on actuarial assets. This loss, along with the recent changes in assumptions, are the key factors affecting this year's valuation results.

Note that currently a \$1.0 billion net asset gain is being deferred. This is because the asset-smoothing method has recognized most of the losses from fiscal years ending in 2002 and 2003, but only a third of the gain from this year. The 2004 gain will be reflected over the next two valuations.

- **Investigation of Experience:** This valuation reflects the new assumptions adopted with the 2004 Investigation of Experience. The overall impact of these changes was to increase the liabilities and reduce the normal cost rate.
- **Funding:** The Funded Ratio decreased from 87.2% to 82.8%. About half of the decrease is due to the asset loss; most of the rest is due to the new assumptions.
- **Contribution Rates:** The County normal cost rate (9.60%) decreased due to the new assumptions. There is now an Unfunded Actuarial Accrued Liability (UAAL) of \$5.61 billion. We are recommending the County contribute 6.41% of payroll to finance the UAAL over 30 years from the current valuation date, in addition to the County normal cost rate of 9.60%. The result is an increase in the recommended total contribution rate from the prior valuation of 1.36% (from 14.65% to 16.01% of payroll). Once again, the most important factor causing this increase was the asset loss, with the new assumptions being the second largest factor.

## Summary of the Findings (continued)

### Recommended Change

We recommend that the Board of Investments change the County contribution rate to reflect this valuation. County contributions for the fiscal year beginning July 1, 2005 would be equal to the total contribution rate of 16.01%. The recommended contribution rate of 16.01% is currently adequate to maintain the funding of the retirement system benefits based on the actuarial methods and assumptions used and satisfies the funding policies adopted by the Board.

The asset smoothing method has delayed recognition of a net investment gain of \$1.0 billion. It will be recognized over the next two years. Therefore, if experience emerges according to the assumptions, we do not expect to see the large increases in the UAAL and the contribution rate next year that have occurred over the past two years.

### Funding Progress

Based on the 2003 valuation, the expected funding status as of June 30, 2004 was a UAAL amount of \$4.92 billion. This included an increase in liabilities of \$0.70 billion as a result of the new assumptions. The actual UAAL for the fiscal year ending June 30, 2004 is \$5.61 billion. The additional increase was due to a net experience loss on assets of \$0.87 billion and a gain on liabilities of \$0.18 billion. The gain on liabilities was due to an actual increase in salaries less than the assumed rate.

## Summary of the Findings (continued)

### Funding Progress (continued)

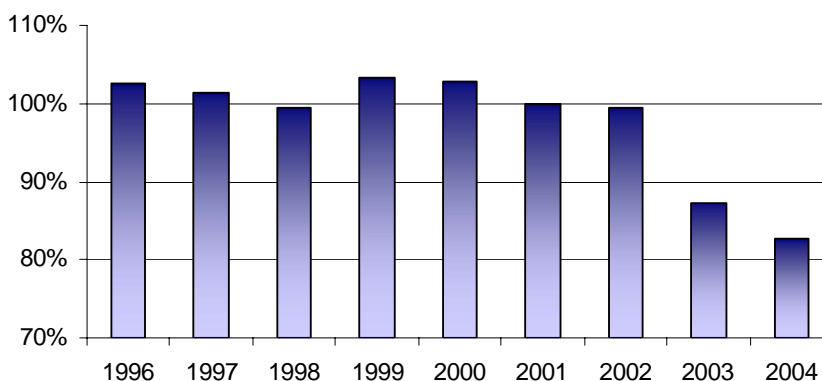
One measure of the funding adequacy of the plan is the Funded Ratio which compares the value of the Actuarial Value of Assets (net of certain non-valuation reserves) to the Actuarial Accrued Liability, for all LACERA plans combined. LACERA had maintained a Funded Ratio of approximately 100% for 1996-2002. Due to asset losses recently recognized, the Funded Ratio has decreased significantly in the past two years to 82.8%, as shown below.

On June 30, 2004, the total Market Value of the fund was \$29.5 billion. The Actuarial Value was \$28.5 billion and was split between \$1.4 billion of Non-valuation Reserves and \$27.1 billion of Valuation Reserves. The Valuation Reserves are equal to 82.8% of the \$32.7 billion Actuarial Accrued Liability.

All dollar amounts in billions

	Market Value of Total Assets	Actuarial Value		Actuarial Accrued Liability	Funded Ratio
		Non- Valuation Reserves	Valuation Reserves		
1996	\$20.2	\$1.6	\$17.7	\$17.3	102.6%
1997	22.9	1.8	19.6	19.3	101.3
1998	25.5	3.5	20.9	21.0	99.5
1999	28.0	3.7	23.5	22.8	103.3
2000	31.6	4.3	25.4	24.7	102.9
2001	28.4	4.4	26.5	26.5	100.0
2002	26.0	2.0	28.3	28.4	99.4
2003	26.2	1.6	26.6	30.5	87.2
2004	29.5	1.4	27.1	32.7	82.8

### Historical Funded Ratios



**Association Assets**

Market Value: The market value of assets has increased over the past five years, as a result of contributions and investment earnings, offset by benefit payments. The average return for the fund over that period has been 4.5%. The values shown in the market value column are total assets net of liabilities, and include all reserves.

Actuarial Assets: The market value of total assets is used in calculating the actuarial value of assets. Under the actuarial asset method, the market value returns are smoothed over a three-year period.

Valuation Reserves: The reserves represent the ownership of LACERA's assets. The reserves are established in compliance with the County Employees Retirement Law of 1937 as administered by the Board of Investments. These assets also reflect smoothing.

Non-Valuation Reserves: The non-valuation reserves are set aside for obligations or contingencies. They are not used to fund the retirement benefits unless explicitly stated. These assets may also reflect smoothing.

Valuation Assets: This is the combination of the valuation reserves and the portion of the non-valuation reserves that are recognized for funding purposes only as allowed under the new Retirement Benefits Enhancement Agreement.

**Actuarial Balance Sheet**

The first step in the valuation process is to compare the total actuarial assets of LACERA with its total liabilities for all plans. In this analysis, assets equal those currently on hand, at the actuarial value, and also expected future contributions by both the County and members. Liabilities reflect benefits already earned in the past and those expected to be earned in the future by current members. This relationship is shown in the following chart. The Actuarial Accrued Liability (AAL) is the total of these liabilities less expected future normal cost contributions.

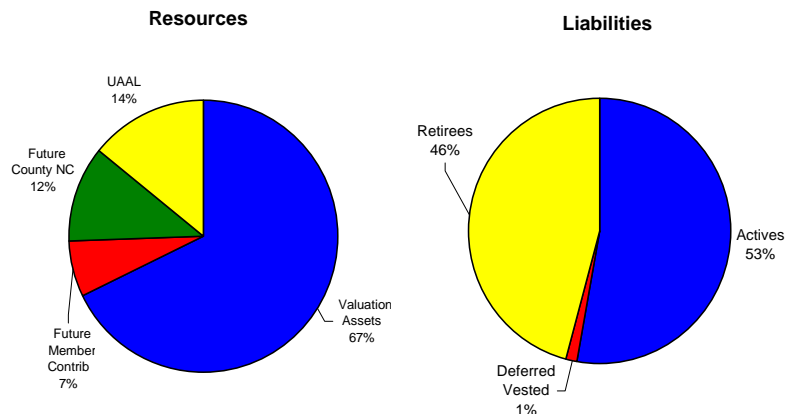
Comparing the current and future assets to the current and future liabilities, we then determine the annual contribution amount for the coming fiscal year.



## Summary of the Findings (continued)

### Actuarial Balance Sheet (continued)

The 2004 actuarial valuation indicates that LACERA's Valuation Assets are less than its AAL. The difference between these two values is the UAAL. It is discussed, along with the effect of the experience gains and losses, in detail in Section 4, Actuarial Liabilities.



### Funding Agreement

In 1994, the County and LACERA entered into a Funding Agreement that determined how the excess earnings were to be allocated for 1994-1998 and how County contributions were to be computed if a UAAL existed. Since LACERA met the funding requirements of the funding agreement in 1994-1998, County contributions consisted of the Normal Cost contribution only during that period.

### Funding Policy

The 1994 Funding Agreement indicated the funding policy to be followed in 1994 through 1998. It only describes the amortization of any UAAL amounts for 1999-2008. During 2000, the Board discussed a long-term funding policy and established a method of allocating earnings on the various reserve funds under their Interim Funding Policy. In 2003, along with adopting the new MOU benefit enhancements, a Retirement Benefits Enhancement Agreement set up a new funding policy for the 2002- 2008 valuations. Under the new 2002 Retirement Benefits Enhancement Agreement, all of the funds in the Contingency Reserve in excess of 1% of the actuarial value of assets of the entire fund are considered as part of the Valuation Assets. In addition, in any year in which the Funded Ratio is less than 100% prior to its inclusion, a portion of the STAR Reserve is also to be considered as part of the Valuation Assets. The portion that is not available for treatment as Valuation Assets is the amount determined to be sufficient to fund the STAR benefits until July 1, 2009.

## Summary of the Findings (continued)

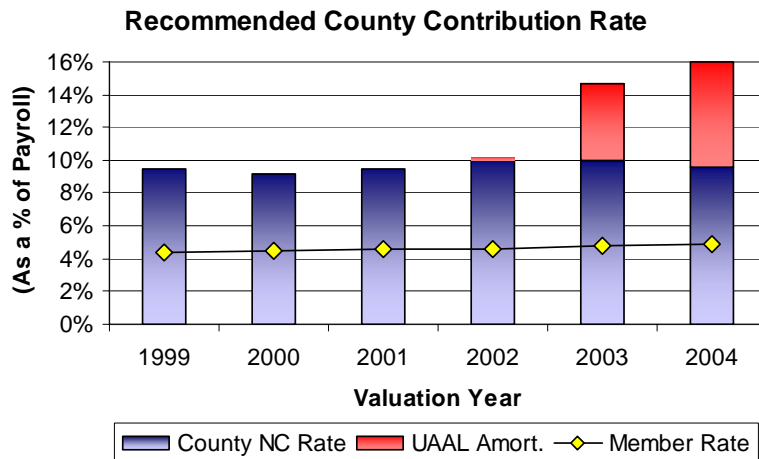
### Funding Policy (continued)

Note that, if the entire STAR reserve of \$657 million was excluded from the Valuation Assets, the UAAL would increase by \$645 million. Under this hypothetical scenario, the recommended County contribution rate would increase by 0.79% to 16.80%, and the Funded Ratio would decrease to 81.2%.

The Retirement Benefits Enhancement Agreement was adopted as a short term funding policy, applicable through the 2008 actuarial valuation.

### Contribution Rates

Based on the results of the valuation, the Interim Funding Policy, and the Retirement Benefits Enhancement Agreement, it is expected that the County contributions will increase for fiscal year beginning in 2005 to a rate of 16.01%. Member contribution rates are discussed in Section 5 and the rates are shown in detail in Appendix D. A historical perspective of the County contribution rates is shown in the following graph.



### Member Rates

Since this is a triennial valuation, we have recommended changes in the member rates due to changes in the actuarial assumptions. These changes are generally small, with the average member rate for the two open contributory plans changing as follows:

Plan	Average Member Rate	
	New	Old
General D	6.77%	6.82%
Safety B	10.26%	10.28%

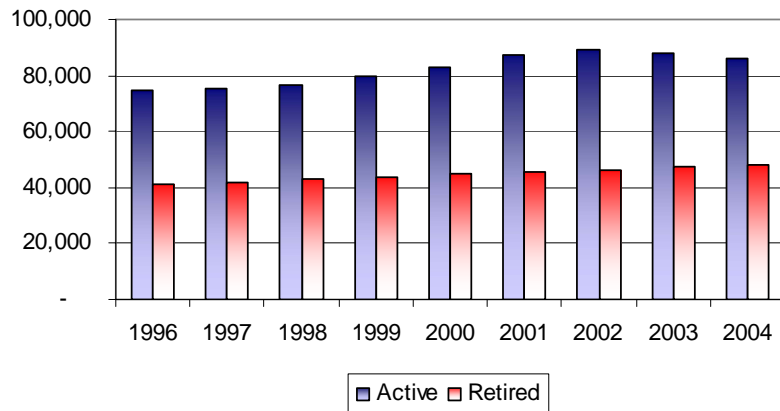
Member rates for all plans are discussed in Section 5.

## Summary of the Findings (continued)

### Member Information

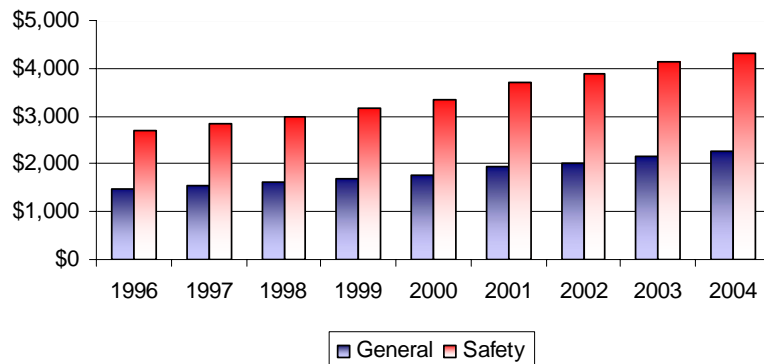
Payroll has increased only slightly since 2003. For 2004, payroll is \$4.94 billion for 86,235 active members. This represents a 0.2% increase in payroll and a 1.7% decrease in active members.

### Membership Count



Retired member counts and average retirement benefit amounts continue to increase steadily. For 2004, there were 48,332 retired members with an average benefit of \$2,645 per month. This represents a 2.3% increase in count and a 5.1% increase in the average monthly benefit.

### Average Monthly Retirement Benefit



## Summary of the Findings (continued)

### Analysis of Change in Member Population

The following table summarizes the year-to-year change in member population. The number of transfers between Plans D and E decreased significantly this year. 555 members (1,759 last year) transferred from Plan D to Plan E during the past year; and 128 members (633 last year) transferred from Plan E to Plan D.

	Active Contributing Members	Deferred Vested Members	Retirees, Disabilities, & Beneficiaries
<b>June 30, 2003 Valuation</b>	<b>87,760</b>	<b>6,394</b>	<b>47,232</b>
Termination without Refund	(664)	664	-
Termination with Refund	(1,562)	(129)	-
Active/Deferred Death with Annuity	(83)	(32)	115
Service Retirement	(1,806)	(280)	2,086
Disability Retirement	(244)	(2)	246
Retiree Death without Beneficiary	-	-	(1,347)
New Entrants	2,778	-	-
Rehires	56	(56)	-
<b>Total Change</b>	<b>(1,525)</b>	<b>165</b>	<b>1,100</b>
<b>June 30, 2004 Valuation</b>	<b>86,235</b>	<b>6,559</b>	<b>48,332</b>

### Sensitivity to Investment Return

The valuation results are projections based on the actuarial assumptions. Actual experience will differ from these assumptions, either increasing or decreasing the ultimate cost. Of the assumptions, the investment return generally has the biggest impact. The following chart provides a simple analysis on how the costs are affected by the investment return assumption.

	<b>Investment Return Assumption</b>		
	<b>Current 7.75%</b>	<b>+0.5% 8.25%</b>	<b>-0.5% 7.25%</b>
<b>County Contribution Rate</b>	16.01%	12.79%	19.33%
Change		-3.22%	3.32%
<b>Funded Ratio</b>	82.8%	88.0%	77.8%
Change		5.2%	-5.0%

### Summary Valuation Results

The following Exhibit 0 presents a summary of key data elements on June 30, 2004 and June 30, 2003, and how they changed over the past year. More detail on each of these elements can be found in the following Sections and Exhibits of this report.

# Los Angeles County Employees Retirement Association

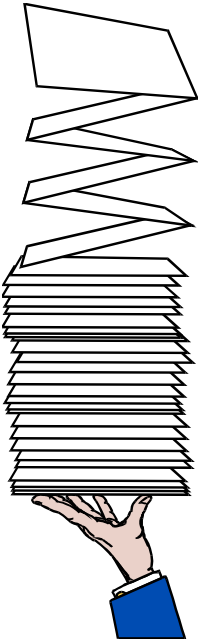
## Exhibit 0: Summary of Significant Valuation Results

	<u>June 30, 2004</u>	<u>June 30, 2003</u>	<u>Percentage Change</u>
I. Total Membership			
A. Active Members	86,235	87,760	(1.7)%
B. Retired Members & Beneficiaries	48,332	47,232	2.3%
C. Vested Terminated Members	<u>6,559</u>	<u>6,394</u>	2.6%
D. Total	141,126	141,386	(0.2)%
II. Pay Rate as of June 30, 2004			
A. Annual Total (\$millions)	\$ 4,942	\$ 4,934	0.2%
B. Monthly Average	\$ 4,776	\$ 4,685	1.9%
III. Average Monthly Benefit to Current Retirees and Beneficiaries			
A. Service Retirement	\$ 2,712	\$ 2,586	4.9%
B. Disability Retirement	\$ 3,186	\$ 3,022	5.4%
C. Surviving Spouse and Dependents	\$ 1,646	\$ 1,568	5.0%
D. Total	\$ 2,645	\$ 2,518	5.1%
IV. Actuarial Accrued Liability			
A. Active Members	\$ 13,843	\$ 13,630	1.6%
B. Retired Members	\$ 18,331	\$ 16,387	11.9%
C. Vested Terminated Members	<u>\$ 526</u>	<u>\$ 458</u>	15.0%
D. Total	\$ 32,700	\$ 30,474	7.3%
V. Assets			
A. Market Value of Fund (\$millions)	\$ 29,481	\$ 26,248	12.3%
B. Actuarial Value (\$millions)			
a. Valuation Reserves	\$ 27,089	\$ 26,564	2.0%
b. Non-valuation Reserves	\$ 1,387	\$ 1,632	(15.0)%
VI. Unfunded Actuarial Accrued Liability or Surplus Funding (\$millions)	\$ 5,611	\$ 3,910	43.5%
VII. County contribution rate for all plans combined as a percent of total Association payroll			
A. Normal Cost	9.60%	9.99%	(3.9)%
B. UAAL Amortization	<u>6.41%</u>	<u>4.66%</u>	37.6%
C. Total Contribution	16.01%	14.65%	9.3%
VIII. Funded Ratio	82.8%	87.2%	(5.0)%

# Los Angeles County Employees Retirement Association

## Section 2: Scope of the Report

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This report presents the actuarial valuation of the Los Angeles County Employees Retirement Association as of June 30, 2004. This valuation was requested by the Board. Section 31453 of the County Employees Retirement Law of 1937 (the 37 Act) requires an actuarial valuation to be performed at least every three years for the purposes of setting contribution rates. The 2002 valuation met this requirement. However, under the Retirement Benefit Enhancement Agreement, annual valuations redetermine the County Contribution rates each year through 2008.

In reading our cover letter, please pay particular attention to the guidelines employed in the preparation of this report. We also comment on the sources and reliability of both the data and the actuarial assumptions upon which our findings depend. Those comments are the basis for our certification that this report is complete and accurate to the best of our knowledge and belief.

A summary of the findings resulting from this valuation is presented in the previous section. Section 3 describes the assets and investment experience of the System. The assets and investment income are presented in Exhibits 1-3. Exhibit 4 develops the Actuarial Value of Assets as of June 30, 2004. Exhibit 5 develops the Valuation Assets used for funding benefits.

Section 4 describes the benefit obligations of LACERA. Exhibit 6 is the Actuarial Balance Sheet and Exhibit 7a analyzes the change in UAAL (Surplus Funding). Exhibit 7b shows a history of these changes.

Section 5 discusses the Member contribution rates.

Section 6 discusses the County contributions needed to fund the benefits under the actuarial cost method in use.

Section 7 discloses the information required under Statement No. 25 of the Governmental Accounting Standards Board (GASB).

Section 8 shows the estimated cash flow of the system, including a projection of both contributions and benefit payments.

## Scope of The Report (continued)

This report includes several appendices:

- Appendix A A summary of the actuarial procedures, and assumptions used to estimate liabilities and contributions.
- Appendix B A summary of the current benefit structure, as determined by the provisions of governing law on June 30, 2004.
- Appendix C Schedules of valuation data classified by various categories of plan members.
- Appendix D Member contribution rates by plan.
- Appendix E A glossary of actuarial terms used in this report.

## Los Angeles County Employees Retirement Association

### Section 3: Assets



In many respects, an actuarial valuation can be thought of as an inventory process. The inventory is taken as of the actuarial valuation date, which for this valuation is June 30, 2004. On that date, the assets available for the payment of retirement benefits are appraised. These assets are compared with the actuarial liabilities, which are generally well in excess of the actuarial assets. The purpose of the valuation is to determine what future contributions by the members and County are needed to pay all expected future benefits.

This section of the report deals with the determination of assets used for funding purposes. In the next section, the actuarial liabilities will be discussed. Sections 5 and 6 deal with the process for determining required contributions based on the relationship between the actuarial assets and the actuarial liabilities.

A historical summary of the system's assets is presented below:

All dollar amounts in billions				
	Market Value of <u>Total Assets</u>	<u>Actuarial Value</u>		Total Fund Return*
		Non- Valuation <u>Reserves</u>	Valuation <u>Reserves</u>	
1996	\$20.2	NA	\$17.7	N/A
1997	22.9	NA	19.6	17.7%
1998	25.5	NA	20.9	15.5
1999	28.0	3.7	23.5	12.9
2000	31.6	4.3	25.4	15.2
2001	28.4	4.4	26.5	-5.2
2002	26.1	2.0	28.3	-5.6
2003	26.2	1.6	26.6	3.6
2004	29.5	1.4	27.1	16.5

*\*As reported in the Investment Section of the CAFR.*

On June 30, 2004, the total market value of the fund, less current liabilities, was \$29.5 billion. The actuarial value of the fund was determined to be \$28.5 billion, including the non-valuation reserves. The average total fund return for the last five years was 4.5%.



## Financial Exhibits

Exhibit 1 presents a Statement of Plan Net Assets and Exhibit 2 presents a Statement of Changes in Plan Net Assets. Exhibit 3 describes the allocation of LACERA's assets by the various reserve values determined for accounting purposes as disclosed in the comprehensive annual financial report (CAFR).

Exhibits 1-3 are taken directly from data furnished to us by LACERA in their annual financial report. We have accepted these tables for use in this report without audit, but we have reviewed them for reasonableness and consistency with previous reports.

## Actuarial Asset Method

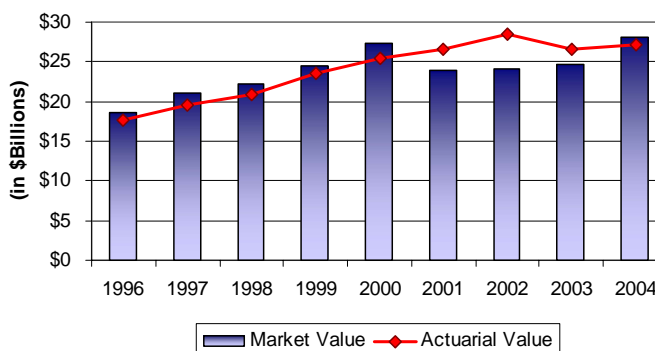
The current actuarial asset method was adopted for the June 30, 1999 valuation but applied only to the valuation reserves; all reserves set aside for other purposes were held at book value. Since the June 30, 2000 valuation, the method has been applied to all reserve values.

The actuarial asset method computes the expected market value of assets based on the prior year's market value of assets, the actual cash flow of contributions and benefit payments, and the assumed investment rate of return. The current assumed rate of return is 7.75%, net of all expenses. The difference between the actual market value and the computed expected market value is smoothed, or recognized over a three-year period.

## Actuarial Value of Assets

The development of the June 30, 2004 actuarial value of assets is shown in Exhibit 4. Note, the smoothing process recognized significant investment losses from 2002 and 2003 this year and is now in a net actuarial gain position. The result is an actuarial value of assets less than the June 30, 2004 market value by \$1.0 billion. The following graph shows a historical comparison of the actuarial and market assets used for valuation purposes.

**Applicable Valuation Assets**



**Interim Actuarial  
Funding Policy**

At the February 14, 2001 Board meeting, the following Interim Actuarial Funding Policy was adopted:

Earnings for a Plan Year, together with the prior balances in the Contingency Reserve will be allocated as of the Valuation Date in the following order of priority:

- Priority 1: Allocate to the Member Reserve an amount equal to one year's interest at the assumed interest rate used in the actuarial valuation as of the preceding Valuation Date.
- Priority 2: Allocate to the Employer Reserve and the Advanced Employer Contributions Reserve amounts equal to one year's interest at the assumed interest rate used in the actuarial valuation as of the preceding Valuation Date.
- Priority 3: Allocate to the Contingency Reserve an amount equal to 1% of Actuarial Value of Assets.
- Priority 4: Allocate to the County Contribution Credit Reserve an amount equal to one year's interest at the assumed interest rate used in the actuarial valuation as of the preceding Valuation Date.
- Priority 5: Allocate to the Employer Reserve an amount, if necessary, when combined with other valuation Reserves, to provide 100% funding of the Actuarial Accrued Liability as of the Valuation Date.
- Priority 6: Allocate any remaining Earnings as directed by the Board of Investments.

There were enough earnings for the year and assets in the contingency reserve to satisfy Priorities 1-4. The remainder was credited to the Employer Reserve (Priority 5); however, this was not enough to provide 100% funding of the AAL.

**Valuation Assets**

Valuation Assets are the actuarial value of the fund, less the value of any reserves which have been set aside for current liabilities and special benefits that are to be funded outside of the actuarially determined contribution rates. The 37 Act requires the Contingency Reserve be set at a minimum of 1.0% of assets.

**Valuation Assets  
(continued)**

The Retirement Benefits Enhancement Agreement allows a portion of the STAR Reserve to also be allocated to the Valuation Assets, if needed. The estimated value of approving a permanent STAR benefit through July 1, 2009 is \$12 million and should be excluded from the Valuation Assets. Thus, all but \$12 million of the June 30, 2004 accounting value of the \$657 million STAR Reserve was used to determine the contribution rates for fiscal year commencing July 1, 2005. The non-valuation reserve allocations for funding purposes shown in Exhibit 5 are not the same as those shown in the annual report and in Exhibit 3.

Note that the County Contribution Credit Reserve is credited with interest under the Interim Funding Policy as shown in Exhibit 5, the allocation of Valuation Assets, and is greater than the accounting value shown in Exhibit 3.

The Retirement Benefits Enhancement Agreement expires on July 1, 2010. Commencing with the June 30, 2009 valuation, the funding policy for LACERA shall be determined by the Board of Investment as it shall deem appropriate.

# Los Angeles County Employees Retirement Association

**Exhibit 1: Statement of Plan Net Assets  
For Years Ended June 30, 2003 and 2004  
(Dollars in Thousands)**

	2004	2003
<b>Assets</b>		
Cash	\$ 39,844	\$ 46,995
Collateral on Loaned Securities	2,770,860	2,485,458
Receivables		
Accounts Receivable – Sale of Investments	347,492	622,747
Accrued Interest and Dividends	102,427	94,745
Accounts Receivable – Other	100,212	103,561
Total Receivables	550,131	821,053
Investments at Fair Value		
Stocks	16,556,302	13,526,826
Bonds	7,588,497	7,368,548
Short-Term Investments	1,086,950	1,417,584
Real Estate	2,952,245	3,143,473
Mortgages	320,594	331,778
Alternative Assets	1,382,499	1,269,916
Total Investments	29,887,087	27,058,125
Capital Assets Net of Depreciation	1	42
<b>Total Assets</b>	<b>33,247,923</b>	<b>30,411,673</b>
<b>Liabilities</b>		
Accounts Payable – Purchase of Investments	924,203	1,612,982
Retiree Payroll and Other Payables	8	50
Accrued Expenses	20,660	19,288
Tax Withholding Payable	14,180	12,838
Obligations under Securities Lending Program	2,770,860	2,485,458
Accounts Payable – Other	36,829	33,251
<b>Total Liabilities</b>	<b>3,766,740</b>	<b>4,163,867</b>
<b>Net Assets Held in Trust for Pension Benefits</b>	<b>\$29,481,183</b>	<b>\$26,247,806</b>

# Los Angeles County Employees Retirement Association

## Exhibit 2: Statement of Changes in Plan Net Assets For the Years Ended June 30, 2003 and 2004 (Dollars in Thousands)

	2004	2003
<b>Additions</b>		
Contributions		
Employer	\$ 395,109	\$ 325,524
Member	262,699	233,192
Total Contributions	<u>657,808</u>	<u>558,716</u>
Investment Income		
<i>From Investing Activities</i>		
Net Appreciation/(Depreciation) in Fair Value of Investments	2,740,449	405,272
Investment Income	1,444,888	580,296
Total Investing Activity Income/(Loss)	<u>4,185,337</u>	<u>985,568</u>
Less Expenses From Investing Activities	<u>(75,823)</u>	<u>(68,258)</u>
Net Investing Activity Income/(Loss)	4,109,514	917,310
<i>From Securities Lending Activities</i>		
Securities Lending Income	36,817	40,995
Less Expenses From Securities Lending Activities	<u>(27,831)</u>	<u>(33,314)</u>
Net Securities Lending Income	<u>8,986</u>	<u>7,681</u>
Total Net Investment Income/(Loss)	4,118,500	924,991
Miscellaneous	2,605	151,215
<b>Total Additions/(Declines)</b>	<u><b>4,778,913</b></u>	<u><b>1,634,922</b></u>
<b>Deductions</b>		
Retiree Payroll	1,426,944	1,320,775
Administrative Expense	38,684	41,523
Refunds	18,088	16,756
Lump Sum Death Benefits	2,479	1,671
Retiree Healthcare Program	59,054	53,407
Miscellaneous	287	224
<b>Total Deductions</b>	<u><b>1,545,536</b></u>	<u><b>1,434,356</b></u>
Net Increase/(Decrease)	3,233,377	200,566
Net Assets Held in Trust for Pension Benefits Beginning of Year	26,247,806	26,047,240
<b>End of Year</b>	<u><b>\$29,481,183</b></u>	<u><b>\$26,247,806</b></u>

## Los Angeles County Employees Retirement Association

### Exhibit 3: Allocation of Assets by Accounting Reserve Amounts (Dollars in Thousands)

	<u>June 30, 2004</u>	<u>June 30, 2003</u>
1. Member Reserves		
a. Active Members	\$ 9,922,484	\$ 9,289,062
b. Unclaimed Deposits	<u>-</u>	<u>-</u>
c. Total Member Reserves	\$ 9,922,484	\$ 9,289,062
2. Employer Reserves		
a. Actual Employer Contributions	\$ 13,365,323	\$ 13,364,507
b. Advanced Employer Contributions	<u>619,883</u>	<u>26,897</u>
c. Total Employer Contributions	\$ 13,985,206	\$ 13,391,404
3. County Contribution Credit Reserve	\$ 375,146	\$ 1,153,018
4. STAR Reserve	656,602	657,037
5. Contingency Reserve	<u>49,090</u>	<u>5,079</u>
6. Total Reserves at Book Value	\$ 24,988,528	\$ 24,495,600
7. Unrealized Investment Portfolio Apprciation	<u>4,492,655</u>	<u>1,752,206</u>
8. <b>Total Reserves at Fair Value</b>	<b>\$ 29,481,183</b>	<b>\$ 26,247,806</b>

Note: These amounts were determined by LACERA for accounting purposes and were reported in the June 30, 2004 CAFR.

# Los Angeles County Employees Retirement Association

## Exhibit 4: 3-Year Smoothing of Gains and Losses on Market Value (Dollars in Thousands)

June 30, 2004 Valuation						
Plan Year Ending	Contributions	Benefits + Expenses	Expected Market Value	Actual Market Value	Phase-Out of Gain / (Loss)	
6/30/2004	\$ 657,808	\$ 1,506,565	\$ 27,465,576	\$ 29,481,183	67% x \$ 2,015,607	= \$ 1,343,738
6/30/2003	558,716	1,392,609	27,264,412	26,247,806	33% x (1,016,606)	= (338,869)
6/30/2002	563,501	1,298,025	29,858,183	26,047,240	0% x (3,810,943)	= 0
6/30/2001				28,353,262		= 0
Total Phase-Out of Gain / (Loss)						= \$ 1,004,869
Total Market Value of Assets						= 29,481,183
Total Actuarial Value of Assets						= \$ <b>28,476,314</b>
Total Actuarial Value of Assets = Total Market Value of Assets less the Total Phase-Out amount Phase-Out amounts will be recognized in future years.						

## Los Angeles County Employees Retirement Association

### Exhibit 5: Allocation of Valuation and Non-Valuation Assets (Dollars in Thousands)

	<u>June 30, 2004</u>	<u>June 30, 2003</u>
1. Total Market Value of Assets	\$ 33,247,923	\$ 30,411,673
2. Current Liabilities	<u>3,766,740</u>	<u>4,163,867</u>
3. Net Assets Held in Trust for Pension Benefits	\$ 29,481,183	\$ 26,247,806
4. Market Stabilization Reserve <sup>(1)</sup>	<u>1,004,869</u>	<u>(1,948,051)</u>
5. Actuarial Value of Fund Assets	\$ 28,476,314	\$ 28,195,857
6. Non-Valuation Reserves <sup>(2)</sup>		
a. Unclaimed Deposits	\$ -	\$ -
b. Contingency Reserve	284,763	281,959
c. Advanced Employer Contributions	620,994	26,897
d. County Contribution Credit Reserve	469,232	1,252,673
e. Reserve for STAR Program	<u>11,885</u>	<u>70,000</u>
f. Total	\$ 1,386,874	\$ 1,631,529
7. Valuation Assets <sup>(2)</sup>		
a. Member Reserves	\$ 9,922,484	\$ 9,289,062
b. Employer Reserves for Funding Purposes	<u>\$ 17,166,956</u>	<u>\$ 17,275,266</u>
c. Total	\$ 27,089,440	\$ 26,564,328

(1) The Market Stabilization Reserve represents the difference between the Market Value of the fund, less Current Liabilities, and the Actuarial Value of the fund as determined in Exhibit 4.

(2) The values used for funding purposes for all reserves are based on the Board's Interim Funding Policy. Amounts used for funding purposes may differ from those reported in the financial report as shown in Exhibit 3.



## Los Angeles County Employees Retirement Association

### Section 4: Actuarial Liabilities

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In the previous section, an actuarial valuation was compared with an inventory process, and an analysis was given of the inventory of LACERA's assets as of the valuation date, June 30, 2003. In this section, the discussion will focus on the commitments of LACERA for retirement benefits, which are referred to as its actuarial liabilities.

In an active system, the actuarial liabilities will almost always exceed the actuarial assets. This is usually expected in all but a fully closed down fund, where no further contributions of any sort are anticipated. This deficiency has to be provided by future contributions and investment returns. An actuarial valuation method sets out a schedule of future contributions that will deal with this deficiency in an orderly fashion. The determination of the level of future contributions needed is discussed in the next section.

#### Actuarial Balance Sheet – Liabilities

First, we need to determine the amount of the deficiency. We compare the Actuarial Value of the Valuation Assets to the Actuarial Liabilities. The difference is the amount that needs to be funded by the Member and County contributions in the future. Both the current and future assets (contributions) are compared to the actuarial liabilities in the Actuarial Balance Sheet.

Exhibit 6 contains an analysis of the actuarial present value of all future benefits for inactive members, (both retired and deferred vested members), and active members. The analysis is given by class of membership, by plan and by type of benefit.

The actuarial liabilities include the actuarial present value of all future benefits expected to be paid with respect to each member. For an active member, this value includes measures of both benefits already earned and future benefits to be earned. For all members, active and inactive, the value extends over benefits yet to be earned and payable for the rest of their lives and for the lives of any surviving beneficiaries.

The actuarial assumptions used to determine the liabilities are based on the results of the 2004 Investigation of Experience Report. New assumptions were adopted by the Board effective June 30, 2004.

## Los Angeles County Employees Retirement Association

**Exhibit 6: Actuarial Balance Sheet – June 30, 2004**  
(Dollars in millions)

	General					Safety		
	Plan A	Plan B	Plan C	Plan D	Plan E	Plan A	Plan B	All Plans
<b>LIABILITIES</b>								
Present Value of Benefits - Inactives								
- Retirees and Beneficiaries	\$ 10,382	\$ 108	\$ 61	\$ 738	\$ 467	\$ 5,961	\$ 614	\$ 18,331
- Vested Terminated	72	18	7	218	152	2	57	526
- Inactive Total	10,454	126	68	956	619	5,963	671	18,857
Present Value of Benefits - Actives								
- Service Retirement	\$ 3,040	\$ 197	\$ 121	\$ 6,037	\$ 3,904	\$ 680	\$ 2,858	\$ 16,837
- Transfer Service (prior LACERA plan)	65	6	1	17	158	6	6	259
- Disability Retirement	82	6	4	581	N/A	344	2,104	3,121
- Death	37	3	2	256	N/A	3	44	345
- Termination (No Refund)	*	*	*	197	172	*	34	403
- Refund of Member Contributions	*	*	*	88	N/A	*	7	95
- Active Total	3,224	212	128	7,176	4,234	1,033	5,053	21,060
<b>Total Actuarial Liabilities</b>	<b>\$ 13,678</b>	<b>\$ 338</b>	<b>\$ 196</b>	<b>\$ 8,132</b>	<b>\$ 4,853</b>	<b>\$ 6,996</b>	<b>\$ 5,724</b>	<b>\$ 39,917</b>
<b>ASSETS</b>								
Valuation Assets	\$ 9,292	\$ 311	\$ 181	\$ 4,457	\$ 4,196	\$ 4,690	\$ 3,962	\$ 27,089
PV Future Member Contributions	37	11	7	1,725	*	6	831	2,617
PV Future County Normal Cost Contribs.	183	11	9	1,863	1,263	56	1,215	4,600
UAAL or (Surplus Funding)	4,166	5	(1)	87	(606)	2,244	(284)	5,611
<b>Total Current and Future Assets</b>	<b>\$ 13,678</b>	<b>\$ 338</b>	<b>\$ 196</b>	<b>\$ 8,132</b>	<b>\$ 4,853</b>	<b>\$ 6,996</b>	<b>\$ 5,724</b>	<b>\$ 39,917</b>

\* Less than \$0.5 million

**Actuarial Balance  
Sheet – Liabilities  
(continued)**

All liabilities reflect the benefits effective through June 30, 2004. This includes the permanent STAR COLA adopted for 2004 and the estimated retroactive benefit payments pursuant to the final Ventura settlement (\$177 million).

**Actuarial Balance  
Sheet – Assets**

For the purpose of the Actuarial Balance Sheet, LACERA's assets are equal to the sum of:

- (a) assets currently available to pay benefits and considered for funding purposes, the Valuation Assets,
- (b) the present value of future contributions expected to be made by current active Members, and
- (c) the present value of future contributions expected to be made by the County.

**Actuarial Cost  
Method**

The Actuarial Balance sheet determines the amount of future contributions that are needed, but the method used to determine the incidence of when those future contributions are yet to be made in future years is called the "actuarial cost method". For this valuation, the entry age actuarial cost method has been used. Under this method – or essentially any actuarial cost method – the contributions required to meet the difference between current assets and current actuarial liabilities are allocated each year between two elements:

- A normal cost amount; and
- Whatever amount is left over, which is used to amortize what is called the UAAL.

The two items described above – the normal cost and UAAL – are the keys to understanding the actuarial cost method.

**Normal Cost**

The normal cost is the theoretical contribution rate that will meet the ongoing costs of a group of average new employees. Suppose that a group of new employees was covered under a separate fund from which all benefits and to which all contributions and associated investment returns were paid.

Under the entry age actuarial cost method, the normal cost contribution rate maintains the funding of benefits as a level percentage of pay. If experience follows the actuarial assumptions precisely, the fund would be completely liquidated when the last payment to the last survivor of the group was made.

## Actuarial Liabilities (continued)

### Normal Cost (continued)

By applying the normal cost contribution rate to the present value of salaries expected to be paid in the future, we determine the present value of future normal cost contributions. Future contributions are expected to be made by both the Members and the County. The member contribution rates are determined based upon requirements established in the 37 Act and the actuarial assumptions. Based on these member contribution rates, we determine the present value of future member contributions. We subtract that value from the total future normal cost contributions expected, based on the entry age cost method. The remaining difference is the County's portion of the future normal cost contributions.

### Actuarial Accrued Liability

The difference between the present value of all future obligations and the present value of the future normal cost contributions is referred to as the "actuarial accrued liability". The Actuarial Accrued Liability is then compared to the value of assets available to fund benefits, and the difference is referred to as the UAAL. The results for LACERA for all plans are summarized below:

(Dollars in millions)	2004	2003	Percent Change
A. Actuarial present value of all future benefits for contributing members, former contributing members, and their survivors	\$ 39,917	\$ 37,739	5.8%
B. Actuarial present value of total future normal costs for current members	\$ 7,217	\$ 7,265	(0.7)%
C. Actuarial accrued liability [A-B]	\$ 32,700	\$ 30,474	7.3%
D. Valuation Assets	\$ 27,089	\$ 26,564	2.0%
E. UAAL or Surplus Funding [C-D]	\$ 5,611	\$ 3,910	43.5%
F. Funded Ratio [D/C]	82.8%	87.2%	(5.0)%

**Actuarial Accrued  
Liability  
(continued)**

It is interesting to note the maturity of LACERA's fund. Nearly one half, 47%, of the total actuarial obligations is for retired and deferred vested members. Of the \$21.1 billion in obligations for the active members, the cost method allocates about two-thirds to service already rendered. Of course, Plans A-C for general members and Plan A for safety members are no longer open for new employees. To the extent those older plans represent more costly plan benefits, this adds to the weighting for accrued obligations.

**Unfunded Actuarial  
Accrued Liability/  
Surplus Funding**

The portion allocated to service already rendered or accrued is called the Actuarial Accrued Liability. The difference between the Actuarial Accrued Liability and the Valuation Assets is called the Unfunded Actuarial Accrued Liability (UAAL). If a UAAL amount exists, it usually results from prior years' benefit or assumption changes and the net effect of accumulated gains and losses. If the County had always contributed the current Normal Cost, if there were no prior benefit or assumption changes and if actual experience exactly matched the actuarial assumptions, the present value of all future Normal Cost contributions would be sufficient to fund all benefits and there would be no UAAL.

The term "fully funded" is often applied to a system in which contributions for everyone at the normal cost rate are sufficient to pay for the benefits of existing employees. More often than not, systems are not fully funded, either because of past benefit improvements that have not been completely paid for or because of actuarial deficiencies that have occurred because experience has not been as favorable as anticipated. Under these circumstances, a UAAL exists, implying that past experience has varied from what was assumed to have occurred based on the current benefit levels and actuarial assumptions.

However, even if a system does not have a positive UAAL, a portion or all of the normal cost contribution payments will need to be continued in order to have sufficient funds to pay future benefits. The use of the term "fully funded" may seem to imply no further contributions are required. Therefore, a better term is a "well-funded" plan. This occurs when the value of the assets equals or exceeds the Actuarial Accrued Liability and the difference can be referred to as the Surplus Funding.

Exhibit 6 shows how the UAAL, or Surplus Funding, was derived for each level of plan benefits. In the Actuarial Balance sheet, the total actuarial accrued liability for all future benefits must be equal to the current and future assets.

**Unfunded Actuarial  
Accrued Liability/  
Surplus Funding  
(continued)**

The Actuarial Balance Sheet for each plan, as well as its UAAL, or Surplus Funding amount, is based on an estimated allocation of the total LACERA Valuation Assets, as disclosed in Exhibit 6. The allocation is based on the relative value of each plan's employer and member reserves as reported to us by LACERA. These allocations are shown for illustrative purposes only, as the UAAL contribution rates are assumed paid by the County based on the valuation results in aggregate.

**Funding Adequacy**

A key consideration in determining the adequacy of the funding of LACERA is how the UAAL is being funded. If the UAAL amount is positive, that is, the actuarial accrued liability to be funded is greater than the Valuation Assets, then the UAAL is amortized. Under the new Retirement Benefits Enhancement Agreement with the County, any positive amount as of June 30, 2002 through 2008 must be amortized over a rolling 30-year period.

If future experience is more favorable than expected based on the actuarial assumptions, then LACERA may move to a Surplus Funding position. Conversely, if experience is less favorable, a larger UAAL will develop.

**Funding Policy**

The 1994 Funding Agreement applied to valuations in 1994 through 1998. In 2000, an Interim Funding Policy was adopted as described more fully in Section 3, Assets, and has been applied since then. The current Retirement Benefits Enhancement Agreement applies to the 2002 – 2008 valuations. This valuation reflects the combined funding policy as directed by those agreements.

**Analysis of Change  
in Unfunded  
Actuarial Accrued  
Liability**

The UAAL, at any date after establishment of a system, is affected by any actuarial gains or losses arising when the actual experience of the system varies from the experience anticipated by the actuarial assumptions used in the valuations. To the extent actual experience, as it develops, differs from that expected according to the assumptions used, so also will the emerging costs differ from the estimated costs.

The funded status of LACERA from 1996 to 2002 remained at approximately 100%. This funding level was the result of asset returns in excess of the assumed rate, positive actuarial experience and the infusion of approximately \$2 billion into the fund, due to the issuance of Pension Obligation Bonds by the County in 1994. In the last two years, the funding level has decreased significantly due to losses on the Valuation Assets reflected under the asset-smoothing method.

**Analysis of Change  
in Unfunded  
Actuarial Accrued  
Liability  
(continued)**

The funded status of LACERA from 1996 to 2002 remained at approximately 100%. This funding level was the result of asset returns in excess of the assumed rate, positive actuarial experience and the infusion of approximately \$2 billion into the fund, due to the issuance of Pension Obligation Bonds by the County in 1994. In the last two years, the funding level has decreased significantly due to losses on the Valuation Assets reflected under the asset-smoothing method.

The 2004 actuarial valuation reflects an actuarial experience loss of \$692 million for the fiscal year just ended. The loss was due to an \$871 million loss on actuarial assets. This was offset somewhat by a gain on salary increases. The effect of the experience gains and losses on the UAAL or Surplus Funding is shown in Exhibit 7a. In addition to the investment return, some other factors which impacted the liabilities are:

- ✓ **New Assumptions** – There was an increase in the UAAL due to the new assumptions.
- ✓ **Salary Increases** - Individual salaries increased at a rate less than the valuation assumption. This resulted in a gain.
- ✓ **Mortality Loss** – An actuarial loss due to mortality generally indicates that retired members are living longer than the current assumption would predict. This year, there was a small loss shown under mortality due to a data correction that increased retiree liabilities. Without the data correction, there would have been a small mortality gain.
- ✓ **CPI Less than Expected** – The CPI used for retiree COLAs was less than 3%. Thus, some Plan A members received increases in their benefits less than assumed.
- ✓ **Transfers Between Plans D & E** – 555 members transferred from Plan D to Plan E during the past year. 128 members transferred from Plan E to Plan D. This resulted in a small increase in liabilities.
- ✓ **Other** – Examples of this are gains and losses from termination, service retirement, disability retirement, death, service purchases, reciprocity, and data revisions.

**Change in Unfunded  
Actuarial Accrued  
Liability - History**

Exhibit 7b shows the sources of change in the UAAL over the past five valuations. As is generally the case, the biggest source of change is a return on investments that is either greater than or less than the assumption, causing asset gains and losses.

# Los Angeles County Employees Retirement Association

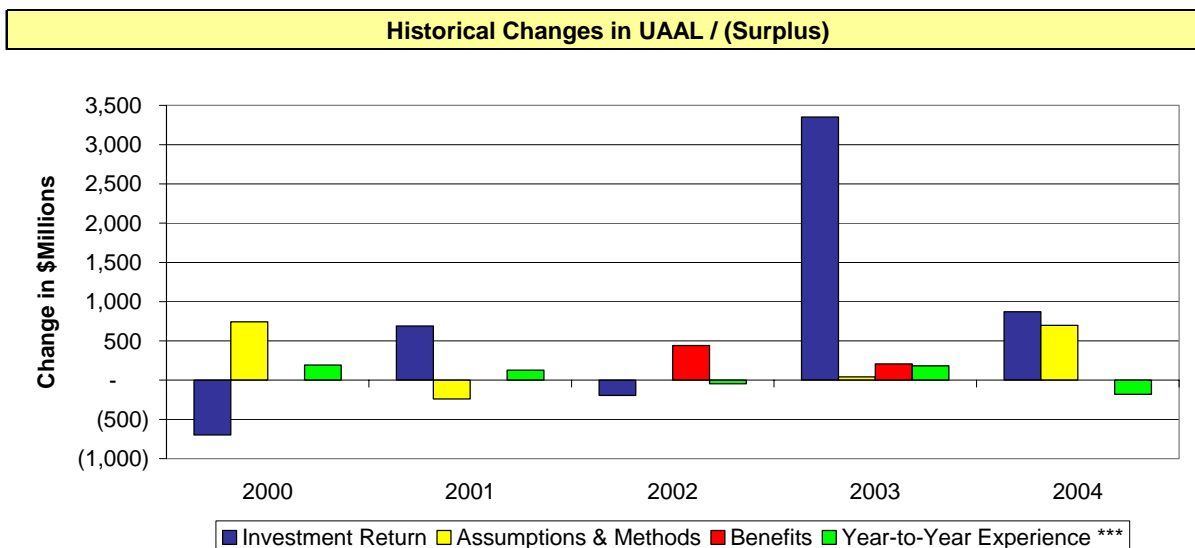
## Exhibit 7a: Analysis of Change in Unfunded Actuarial Accrued Liability (Dollars in millions)

	Amount	As a Percent of June 30, 2004 Actuarial Acc. Liability
<b>Unfunded Actuarial Accrued Liability - June 30, 2003</b>	<b>\$ 3,910</b>	12.0%
Increase in UAAL due to new assumptions	697	2.1%
<b>UAAL (New Assumptions) - June 30, 2003</b>	<b>\$ 4,607</b>	14.1%
Interest Accrued	357	1.1%
Benefits Accrued (Normal Cost)	770	2.4%
Contributions (with Assumed Interest)		
Employer - Cash	(410)	-1.3%
Employer - Contribution Credit	(132)	-0.4%
Member	(273)	-0.8%
Total	(815)	-2.5%
<b>Expected Unfunded Actuarial Acc. Liability - June 30, 2004</b>	<b>\$ 4,919</b>	15.0%
Source of Change		
Asset (Gains) and Losses		
(Gain)/Loss due to investment income	929	2.8%
(Gain)/Loss due to recognition of STAR reserves	(58)	-0.2%
Total	871	2.7%
Actuarial (Gains) and Losses		
Salary Increases	(270)	-0.8%
Retiree Mortality	61	0.2%
Transfers Between Plan D & Plan E	15	0.0%
CPI Less than Expected	(31)	-0.1%
Other	46	0.1%
Total	(179)	-0.5%
Change in Methodology	-	0.0%
<b>Total Changes</b>	<b>692</b>	2.1%
<b>Unfunded Actuarial Accrued Liability - June 30, 2004</b>	<b>\$ 5,611</b>	17.2%



## Los Angeles County Employees Retirement Association

**Exhibit 7b: History of Changes in Unfunded Actuarial Accrued Liability  
(Dollars in millions)**



	2000	2001	2002	2003	2004	2000-04
<b>Prior Valuation UAAL / (Surplus)</b>	<b>\$ (751)</b>	<b>\$ (706)</b>	<b>0</b>	<b>\$ 175</b>	<b>\$ 3,910</b>	<b>\$ (751)</b>
Increase in UAAL due to:						
Expected Increase / (Decrease)	(192)	128	(26)	(45)	312	177
Asset (Gains) and Losses	(697)	690	(194)	3,351	871	4,021
Changes in Benefits*			441	207		648
Changes in Assumptions		(239)			697	458
Changes in Methods	743			40		783
Salary Increases	(20)	40	(20)	(66)	(270)	(336)
CPI Less than Expected			(39)		(31)	(70)
Transfers Between D & E	**	**	**	29	15	44
Mortality Experience	**	**	**	90	61	151
All Other Experience	211	87	13	129	46	486
<b>Total Increase / (Decrease)</b>	<b>45</b>	<b>706</b>	<b>175</b>	<b>3,735</b>	<b>1,701</b>	<b>6,362</b>
<b>Valuation UAAL / (Surplus)</b>	<b>\$ (706)</b>	<b>0</b>	<b>\$ 175</b>	<b>\$ 3,910</b>	<b>\$ 5,611</b>	<b>\$ 5,611</b>

\* Benefit changes are as follows:

2001: STAR benefits are vested; however, a transfer is made from the STAR reserve which offsets the increased liabilities. Therefore no change is shown.

2002: MOU Benefits.

2003: Domestic partner benefits and estimated increase in benefits due to Ventura lawsuit.

\*\* Not separately measured in this year. Included with Other Experience

\*\*\* Year-to-Year Experience includes changes due to Salary, CPI, Transfers, Mortality and Other Experience.

## Los Angeles County Employees Retirement Association

### Section 5: Member Contributions

#### Normal Contributions

Member contributions are of two types: Normal contributions and cost-of-living contributions.

Normal contributions for each plan are defined in the following sections of the County Employees' Retirement Law:

	General	Safety
Plan A	31621.3	31639.5
Plan B	31621.1	31639.25
Plans C and D	31621	N/A

There are no member contributions under Plan E.

Normal member contributions are determined using the Entry Age Normal Funding Method and the following actuarial assumptions:

1. Expected rate of return on assets
2. Individual salary increase rate (wage growth + merit)
3. Mortality for members on service retirement

Effective with the 2004 valuation, each of the three assumptions was changed, necessitating a change in the member normal rates. In general, member rates decreased at younger entry ages under the new assumptions, and increased at older entry ages.

#### Cost-of-Living Contributions

The determination of the member cost-of-living contributions is based on Section 31873 of the County Employees' Retirement Law. This section requires that the cost of this benefit be shared equally between members and the County. Unlike the member normal contributions, these rates are based on the actuarial cost of the benefits, and reflect all assumptions used in the valuation of liabilities. As this is a triennial valuation, we are recommending a change in the member cost-of-living contribution rates. The cost-of-living contributions, expressed as a percentage of the normal rates, are based on the June 30, 2004 actuarial valuation and are as follows:

	New	Old
General Plan A:	78.28%	75.92%
General Plan B:	21.96%	21.72%
General Plan C:	23.75%	23.24%
General Plan D:	20.98%	21.27%
Safety Plan A:	100.24%	103.60%
Safety Plan B:	30.86%	32.90%

## **Member Contributions (continued)**

### **Cost-of-Living Contributions (continued)**

The relative magnitude of these amounts reflects the differences in the normal contribution rates for each plan and the different cost-of-living benefits offered by the different plans.

A sample of the current member contribution rates (normal plus cost-of-living) can be found in Exhibit 8.

Full disclosure of the member rates, showing both the normal and the total (normal plus cost-of-living) contribution rates, can be found in Appendix D.

## Los Angeles County Employees Retirement Association

### Exhibit 8: Sample Member Contribution Rates

Recommended Rates (Based on 2004 Valuation)						
	Entry Age	Normal	Cost of Living	Total as a % of Pay	Prior Rate (Total)	Ratio (New/Old)
<b>General Members</b>						
<b>Plan A</b>	25	2.78%	2.18%	4.96%	5.01%	99%
	35	3.48%	2.72%	6.20%	6.02%	103%
	45	4.27%	3.34%	7.61%	7.27%	105%
	55	4.62%	3.62%	8.24%	7.85%	105%
<b>Plan B</b>	25	5.57%	1.22%	6.79%	6.94%	98%
	35	6.95%	1.53%	8.48%	8.33%	102%
	45	8.55%	1.88%	10.43%	10.05%	104%
	55	9.24%	2.03%	11.27%	10.86%	104%
<b>Plan C</b>	25	4.68%	1.11%	5.79%	6.01%	96%
	35	5.83%	1.38%	7.21%	7.22%	100%
	45	7.29%	1.73%	9.02%	8.70%	104%
	55	8.61%	2.04%	10.65%	10.24%	104%
<b>Plan D</b>	25	4.68%	0.98%	5.66%	5.92%	96%
	35	5.83%	1.22%	7.05%	7.11%	99%
	45	7.29%	1.53%	8.82%	8.56%	103%
	55	8.61%	1.81%	10.42%	10.08%	103%
<b>Safety Members</b>						
<b>Plan A</b>	25	3.89%	3.90%	7.79%	7.84%	99%
	35	4.86%	4.87%	9.73%	9.45%	103%
	45	5.74%	5.75%	11.49%	11.14%	103%
	55	5.78%	5.79%	11.57%	11.22%	103%
<b>Plan B</b>	25	7.78%	2.40%	10.18%	10.25%	99%
	35	9.72%	3.00%	12.72%	12.33%	103%
	45	11.48%	3.54%	15.02%	14.53%	103%
	55	11.56%	3.57%	15.13%	14.63%	103%

Note: A portion of some of the member contribution rates is paid for ("picked up") by the County and is not considered part of the member's contribution account for refund purposes. Such contributions are referred to as the surcharge amount and are subject to change each year. The rates shown in the table are prior to any surcharge payments.

## Los Angeles County Employees Retirement Association

### Section 6: County Contributions

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Contributions to LACERA are determined using the Entry Age Normal Cost Funding Method. The portion of the actuarial present value of retirement benefits allocated to a valuation year by the Actuarial Cost Method is called the Normal Cost. These amounts are usually expressed as a percentage of payroll and called the Normal Cost Contribution Rate. Exhibit 9 illustrates the Normal Cost Rates by type of benefit and for each plan based on this valuation. A comparison with last year is also shown.

During the fiscal year 1994-1995, a Retirement Association Funding Agreement was negotiated with the County. This agreement resulted in the issuance of approximately \$2 billion in Pension Obligation Bonds, the proceeds of which were used to fund the UAAL of the Association. The agreement also allowed that surplus earnings on Association assets for the period July 1, 1994 through June 30, 1998 would be split between the County (75%) and the STAR program (25%). Those excess earnings were used to create the County Contribution Credit Reserve, which can be used by the County to meet its required contribution requirement without adding in new cash deposits to the fund.

Under the 1994 Funding Agreement, the County's contribution rate is set equal to the County's portion of the Normal Cost contribution not payable by the member contributions and some payment towards the UAAL, but only under certain conditions. From 1995 to 2001, no UAAL contributions were required and the County contributed only their portion of the Normal Cost contribution. Under the new 2002 Retirement Benefits Enhancement Agreement, the County must also pay their portion of the Normal Cost contribution adjusted for either a positive UAAL or a positive Surplus Funding.

The total calculated County contribution rates for each plan, along with a comparison to the prior year's computed rates, can be found in Exhibit 10. These results are expressed as a percentage of payroll and annual contribution dollars. Note that LACERA's UAAL contribution rate is not determined separately for each plan, but is funded evenly as a percentage of pay over salaries for all members. The total County Contribution rate was 14.65% for the fiscal year beginning in 2004.

For the fiscal year beginning in 2005, we are recommending this rate be increased to 16.01%. This is equal to the aggregate calculated normal cost contribution rate, of 9.60% based on the 2004 valuation, plus a 30-year amortization payment of the UAAL.

## County Contributions (continued)

### County Contribution Rate (all values as a % of Payroll)

County Normal Cost	9.60%
30-year Amortization of UAAL	<u>6.41</u>
Total County Contribution	16.01%

The increase in the total County contribution rate was primarily due to the asset losses which caused the increase in the UAAL rate. The UAAL rate reflects a 30-year amortization from the valuation date and the one-year deferral in the implementation of the new County contribution rate effective July 1, 2005.

The change in the calculated normal cost contribution rates from year-to-year is generally due to three factors. These factors are listed in order of magnitude (i.e., the new assumptions had the greatest impact this year):

- (1) **New Assumptions:** The decrease in the assumed individual salary increases caused a decrease in the normal cost rate this year for all members. Additionally, lower service-connected disability rates caused a large decrease in the normal cost rates for Safety members.
- (2) **Experience:** Normal experience from year-to-year, reflecting differences in both the weighting between membership groups and in their characteristics, as well as on what was assumed to occur during the past fiscal year and what actually occurred, particularly with respect to salary increases. Based on current plan provisions, the aggregate normal cost rate is expected to decrease as a greater number of members are covered by General Plans D and E and Safety B. Additionally, as members transfer between Plan D and Plan E, this will also have an impact.
- (3) **Contribution Shut-Off:** For general members hired prior to April 1973 and all safety members, member contributions are not collected after the member has 30 years of service. Therefore, the member contributions towards the total annual normal cost is zero, resulting in a sizable increase in the County's share of the normal cost contributions for the years when the member has more than 30 years of service. The County's share of the normal cost rates for those groups can be expected to increase rather than remain level, as otherwise expected under the entry age cost method. As most general members hired prior to April 1973 have now attained 30 years of service, this statement applies mainly to Safety groups.

# Los Angeles County Employees Retirement Association

## Exhibit 9: Calculated Normal Cost Contribution Rates – June 30, 2004

A. Normal Cost Contribution Rate	General						Safety			Grand Total
	Plan A	Plan B	Plan C	Plan D	Plan E	Total	Plan A	Plan B	Total	
Service Retirement	14.78%	13.17%	11.94%	11.40%	7.29%	10.09%	11.75%	11.41%	11.45%	10.35%
Disability Retirement	1.05%	0.99%	0.97%	1.49%	0.00%	0.88%	12.59%	12.17%	12.21%	2.95%
Death	0.43%	0.41%	0.39%	0.57%	0.00%	0.34%	0.31%	0.29%	0.29%	0.33%
Termination (No Refund)	0.37%	0.25%	0.23%	0.64%	0.63%	0.61%	0.34%	0.38%	0.38%	0.57%
Refund of Member Contributions	0.11%	0.14%	0.12%	0.51%	0.00%	0.28%	0.19%	0.29%	0.28%	0.28%
<b>Total</b>	<b>16.74%</b>	<b>14.96%</b>	<b>13.65%</b>	<b>14.61%</b>	<b>7.92%</b>	<b>12.20%</b>	<b>25.18%</b>	<b>24.54%</b>	<b>24.61%</b>	<b>14.48%</b>
B. Member Contributions	(2.35)%	(6.84)%	(5.90)%	(6.77)%	0.00%	(3.82)%	(3.54)%	(10.26)%	(9.61)%	(4.88)%
C. Net County Normal Cost as of June 30, 2004 (A) - (B)	14.39%	8.12%	7.75%	7.84%	7.92%	8.38%	21.64%	14.28%	15.00%	9.60%
C. Net County Normal Cost as of June 30, 2003	14.65%	8.41%	8.01%	8.06%	7.72%	8.53%	21.94%	15.56%	16.34%	9.99%
E. Increase (Decrease) as a Percentage of Payroll (C) - (D)	(0.26)%	(0.29)%	(0.26)%	(0.22)%	0.20%	(0.14)%	(0.30)%	(1.28)%	(1.34)%	(0.39)%

## Los Angeles County Employees Retirement Association

### Exhibit 10: Total County Contributions

	General						Safety			All Plans
	Plan A	Plan B	Plan C	Plan D	Plan E	Total	Plan A	Plan B	Total	
<b>A. Normal Cost</b>										
1. Basic Benefits	9.60%	6.55%	6.34%	6.54%	6.66%	6.83%	14.18%	11.69%	11.94%	8.15%
2. Cost-of-Living Benefits	4.79%	1.57%	1.41%	1.30%	1.26%	1.56%	7.46%	2.59%	3.08%	1.45%
3. Total June 30, 2003	14.39%	8.12%	7.75%	7.84%	7.92%	8.39%	21.64%	14.28%	15.02%	9.60%
<b>B. UAAL Contribution Rate</b>	6.41%	6.41%	6.41%	6.41%	6.41%	6.41%	6.41%	6.41%	6.41%	6.41%
<b>C. Total June 30, 2004 Contribution Rate (A) + (B)</b>	<b>20.80%</b>	<b>14.53%</b>	<b>14.16%</b>	<b>14.25%</b>	<b>14.33%</b>	<b>14.80%</b>	<b>28.05%</b>	<b>20.69%</b>	<b>21.43%</b>	<b>16.01%</b>
<b>D. Total June 30, 2003 Contribution Rate</b>	19.31%	13.07%	12.67%	12.72%	12.38%	13.19%	26.60%	20.22%	21.00%	14.65%
<b>E. Estimated Payroll for fiscal year beginning July 1, 2005</b>	\$ 329	\$ 30	\$ 21	\$ 2,200	\$ 1,607	\$ 4,187	\$ 94	\$ 847	\$ 941	\$ 5,128
<b>F. Estimated Annual Contribution* (C x E)</b>	<b>68</b>	<b>4</b>	<b>3</b>	<b>314</b>	<b>230</b>	<b>620</b>	<b>26</b>	<b>175</b>	<b>202</b>	<b>822</b>

\* Based upon annualized salary rate as of June 30, 2004 increased by 3.75% wage inflation. Dollar figures in millions.



## Los Angeles County Employees Retirement Association

### Section 7: Accounting Information

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For fiscal years beginning after June 15, 1996, revised GASB reporting standards are required for defined benefit pension plan reporting and disclosures (Statement No. 25). The System adopted the revised reporting standards beginning in 1996. The new reporting requirements for Statement No. 25 include certain supplementary information that must be added to the financial statements. These include:

- (1) A Schedule of Funding Progress
- (2) A Schedule of Employer Contributions

The Schedule of Funding Progress, Exhibit 11, compares actuarial assets and liabilities of the System, based on the actuarial funding method used. The required Schedule of Employer Contributions, Exhibit 12, compares the employer contributions required based on the actuarial valuation (the actuarial required contribution, or ARC) with the employer contributions actually made. The ARC must be calculated based on certain parameters required for disclosure purposes.

We believe the actuarial methods and assumptions used in this valuation to determine the employer's contribution for funding purposes satisfy the new GASB reporting requirements.

For fiscal years beginning after June 15, 1997, GASB Statement No. 27 is required for pension accounting by state and local governmental employers.

The comparability of the data from year to year can be affected by changes in actuarial assumptions, benefit provisions, accounting policies, etc. For example, between June 30, 2000 and June 30, 2001, many actuarial assumptions were changed based on the 2001 triennial Investigation of Experience Study. Between the 2002 and 2003 valuations, benefits were enhanced under the MOU package. Assumptions were again changed in 2004 based on the triennial Investigation of Experience.

Exhibit 13 compares the Actuarial Value of Valuation Assets to the types of Actuarial Accrued Liabilities, applying them first to Active Member contributions, then to retirees and beneficiaries, and then the remaining amount to the Active Members benefits. This is referred to as the Solvency Test. Although not required under GASB, this test is part of the CAFR guidelines specified by the Government Finance Officers Association (GFOA).

# Los Angeles County Employees Retirement Association

## Exhibit 11: Schedule of Funding Progress (All Dollars In Thousands)

Actuarial Valuation Date	(a) Actuarial Value of Valuation Assets	(b) Actuarial Accrued Liabilities	(b-a) Unfunded Actuarial Accrued Liabilities (UAAL)	(a/b) Funded Ratio	(c) Covered Payroll <sup>(1)</sup>	[(b-a)/c] UAAL as a Percentage of Covered Payroll
June 30, 1995	\$ 16,503,672	\$ 16,391,833	\$ (111,839)	100.7%	\$ 3,442,231	-3.2%
June 30, 1996	17,724,744	17,277,651	(447,093)	102.6%	3,355,551	-13.3%
June 30, 1997	19,642,355	19,383,641	(258,714)	101.3%	3,373,314	-7.7%
June 30, 1998	20,851,133	20,959,946	108,813	99.5%	3,562,416	3.1%
June 30, 1999	23,536,116	22,784,706	(751,410)	103.3%	3,858,090	-19.5%
June 30, 2000	25,426,507	24,720,380	(706,127)	102.9%	4,107,964	-17.2%
June 30, 2001	26,490,000	26,489,976	(24)	100.0%	4,398,443	0.0%
June 30, 2002	28,262,129	28,437,493	175,364	99.4%	4,744,340	3.7%
June 30, 2003	26,564,328	31,171,097	4,606,769	85.2%	4,927,139	93.5%
June 30, 2004	27,089,440	32,700,505	5,611,065	82.8%	4,919,531	114.1%

(1) Covered Payroll includes compensation paid to all active employees on which contributions are calculated. Covered Payroll differs from the Active Member Valuation Payroll shown in Table C-1, which is an annualized compensation of only those members who were active on the actuarial valuation date. For years prior to 1999, Covered Payroll is estimated.

# Los Angeles County Employees Retirement Association

## Exhibit 12: Schedule of Contributions from the Employer (All Dollars In Thousands)

Fiscal Year Ending	Annual Required Contribution (ARC)	Actual Employer Contributions			Percentage of ARC Contributed
		Cash Payment	Transfer from Reserve Accounts	Total	
6/30/1996	\$287,548	\$132,452	\$146,309	\$278,761	97%
6/30/1997	277,929	1,168	277,151	278,319	100%
6/30/1998	243,489	9,420	239,777	249,197	102%
6/30/1999	317,285	84,226	248,403	332,629	105%
6/30/2000	342,060	130,319	211,832	342,151	100%
6/30/2001	390,679	193,650	197,029	390,679	100%
6/30/2002	414,708	258,884	155,824	414,708	100%
6/30/2003	518,922	324,709	194,213	518,922	100%
6/30/2004	521,978	395,062	126,916	521,978	100%

# Los Angeles County Employees Retirement Association

## Exhibit 13: Solvency Test (Dollars In Millions)

Actuarial Valuation Date	Actuarial Value of Valuation Assets	Actuarial Accrued Liabilities for			Portion of Actuarial Accrued Liabilities Covered by Assets		
		Active Member Contributions (A)	Retirees and Beneficiaries <sup>(1)</sup> (B)	Active Members (Employer Financed Portion) (C)	(A)	(B)	(C)
June 30, 1998	\$ 20,851	\$ 2,643	\$ 11,268	\$ 7,049	100%	100%	98%
June 30, 1999	23,536	2,710	11,863	8,211	100%	100%	109%
June 30, 2000	25,427	3,190	12,922	8,609	100%	100%	108%
June 30, 2001	26,490	3,320	14,368	8,802	100%	100%	100%
June 30, 2002	28,262	3,596	15,424	9,417	100%	100%	98%
June 30, 2003	26,564	3,790	16,844	9,840	100%	100%	60%
June 30, 2004	27,089	4,042	18,857	9,802	100%	100%	43%

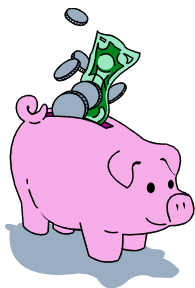
(1) Includes deferred vested members.

## Los Angeles County Employees Retirement Association

### Section 8: Supplemental Information

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#### Cash Flow Projection



Exhibits 14a and 14b are a chart and graph that illustrate both the cash flow history for the past 10 years and a projection on the valuation basis for the next 10 years.

Contributions include both employer and member contributions. The table shows that net cash flow has decreased over the last 10 years, except for 1995 when the Pension Obligation Bond funds were received. It has leveled off somewhat for the past five years, but it is expected to begin to significantly decrease for the next 10 years. This is a typical pattern for a mature retirement system where it is expected that contributions will be less than benefits and that the system will begin drawing on the fund that has been built up over prior years. The projection shows that the negative projected cash flow is expected to more than double in size from 2005 to 2014.

Note that the actual cash contributions since 1996 do not reflect the transfers made between reserve funds, but only cash coming into the System. Starting in 2005, we assumed no further transfers, only full cash contributions. Thus, the actual contributions in 2004 are significantly less than those in the projections for 2005 and later.

The projected cash flows include contributions, statutory benefits and administrative expenses only. They are based on the actuarial assumptions as stated in Appendix A of this valuation report. The total County contribution rate is assumed to be 14.65% for the first year and 16.01% for the rest of the 10-year projection. The ultimate rate is equal to the County normal cost rate plus a contribution to finance the UAAL, as calculated and recommended in the 2004 valuation. The aggregate Member rate is assumed to stay at the calculated rate for June 30, 2004 of 4.88% of payroll. Expenses are based on the expenses for the year ended June 30, 2004, increased annually with the actuarial inflation assumption of 3.5%.

Any increases or reductions in future contribution rates will increase or decrease the net cash flow. The projected cash flows do not include:

- Projected STAR benefits. STAR benefits that were vested as of January 2004 are included.
- Projected benefits payable under certain insurance contracts for a group of retired members. These payments are netted against the total expected retiree benefits.

# Los Angeles County Employees Retirement Association

## Exhibit 14A: Cash Flow History and Projections - Dollars

Cash Flow History <sup>(1)</sup>			
Plan Year		Benefits & Administrative	Net
Ending	Contributions	Expenses <sup>(3)</sup>	Cash Flow
1995	\$ 2,212	\$ 798	\$ 1,414
1996	316	857	(541)
1997	172	910	(738)
1998	189	968	(779)
1999	288	1,024	(736)
2000	329	1,094	(765)
2001	410	1,187	(777)
2002	564	1,276	(712)
2003	559	1,379	(820)
2004	658	1,546	(888)

Cash Flow Projections <sup>(2)</sup>			
Plan Year		Benefits & Administrative	Net
Ending	Contributions	Expenses <sup>(3)</sup>	Cash Flow
2005	\$ 962	\$ 1,587	\$ (625)
2006	1,071	1,692	(621)
2007	1,111	1,801	(690)
2008	1,153	1,913	(760)
2009	1,196	2,028	(832)
2010	1,241	2,148	(907)
2011	1,288	2,273	(985)
2012	1,336	2,402	(1,066)
2013	1,386	2,536	(1,150)
2014	1,438	2,676	(1,238)

<sup>(1)</sup> 1995 Contributions reflect income from Pension Obligation Bond.

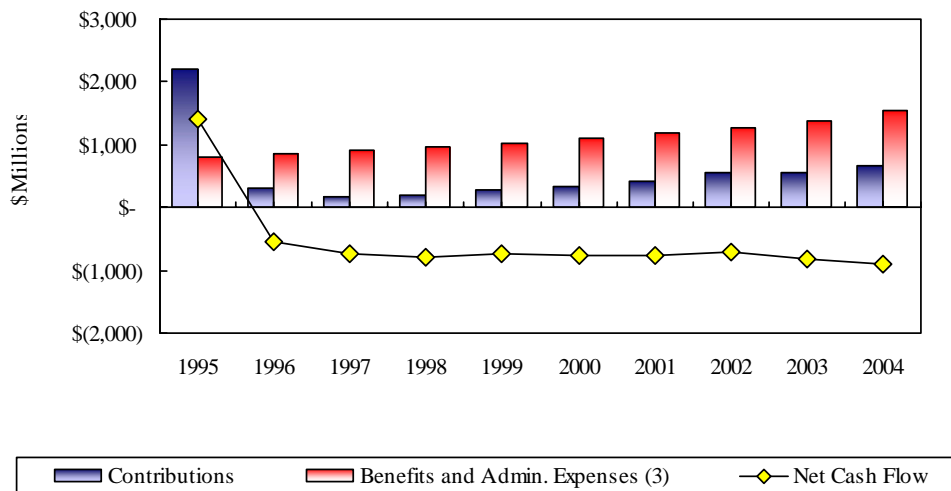
<sup>(2)</sup> Future contributions are assumed to be at the 9.60% normal cost rate plus a UAAL payment of 6.41% after the first year.

<sup>(3)</sup> Investment expenses are assumed to be covered by investment return.

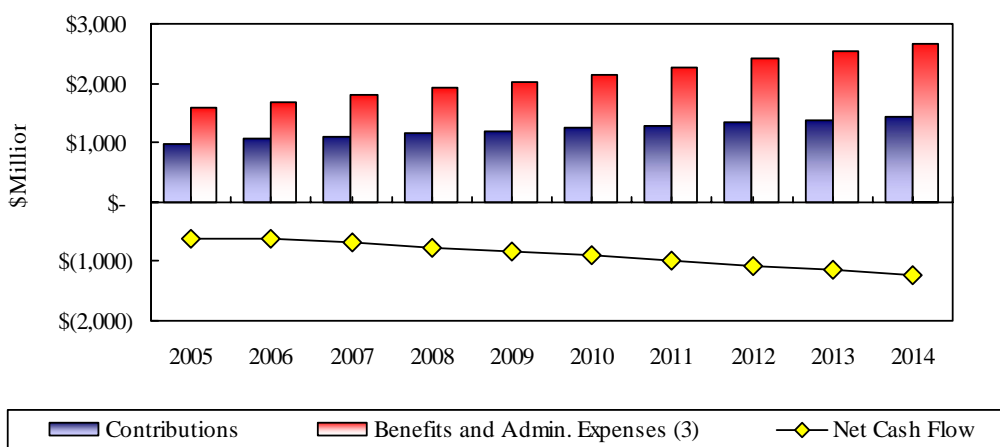
## Los Angeles County Employees Retirement Association

### Exhibit 14B: Cash Flow History and Projections - Charts

#### Cash Flow History<sup>(1)</sup>



#### Cash Flow Projections<sup>(2)</sup>



<sup>(1)</sup> 1995 Contributions reflect income from Pension Obligation Bond.

<sup>(2)</sup> Future contributions are assumed to be at the 9.60% normal cost rate plus a UAAL payment of 6.41% after the first year.

<sup>(3)</sup> Investment expenses are assumed to be covered by investment return.

## Los Angeles County Employees Retirement Association

### Appendix A: Actuarial Procedures and Assumptions

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The actuarial procedures and assumptions used in this valuation are described in this section. The assumptions were reviewed and changed June 30, 2004 as a result of the 2004 triennial Investigation of Experience Study.

The actuarial assumptions used in the valuations are intended to estimate the future experience of the members of LACERA and of LACERA itself in areas that affect the projected benefit flow and anticipated investment earnings. Any variations in future experience from that expected from these assumptions will result in corresponding changes in the estimated costs of LACERA's benefits.

Table A-1 summarizes the assumptions. The mortality rates are taken from the sources listed.

Tables A-2 and A-3 show how members are expected to leave retired status due to death.

Table A-4 presents the probability of refund of contributions upon termination of employment while vested.

Table A-5 presents the expected annual percentage increase in salaries.

Tables A-6 to A-13 were developed from the experience as measured by the 2004 Investigation of Experience Study. The rates are the probabilities a member will leave the system for various reasons.

A summary of the changes from the Investigation of Experience are summarized in the following chart.



<b>Assumption</b>	<b>Recommendation</b>
<b>Actuarial Methods</b>	No Change.
<b>Economic</b>	Investment Return: 7.75% (was 8.0%) Price Inflation: 3.5% (was 4.0%) General Wage Increase: 3.75% (was 4.0%) Payroll Increase: 3.75% (was 4.0%)
<b>Merit Salary Increase</b>	New table with smaller increases for members with more than 10 years of service.
<b>Death While Active</b>	Change Plan E rates to be consistent with other members.
<b>Service Retirement</b>	Small changes, varying by plan.
<b>Disability Retirement</b>	Decrease in most rates.
<b>Termination</b>	1. Adopt lower rates for General Plan D and Plan E members, particularly for members with more than 10 years of service. 2. Adopt revised rates for Safety members based on years of service rather than attained age, increasing terminations for members with less than 5 years of service. No change to General Plans A-C.
<b>Probability of Refund</b>	Adopt revised rates for General and Safety members based on years of service.
<b>Retiree Mortality</b>	Healthy Service Retirees: Adopt new tables with lower rates of mortality for all plans. Sample life expectancies are shown below. Disabled Retirees: No Change
<b>Miscellaneous</b>	New probabilities of having an eligible survivor – lower for male and higher for female.

<b>Sample Expected Lifetimes for Service Retirement</b>				
<b>Old Assumptions</b>	<b>General</b>		<b>Safety</b>	
	<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
Age at Retirement	60.0	60.0	55.0	55.0
Expected Future Lifetime	22.1	26.1	26.9	30.7
Average Age at Death	82.1	86.1	81.9	85.7
<b>New Assumptions</b>				
Age at Retirement	60.0	60.0	55.0	55.0
Expected Future Lifetime	23.5	26.2	29.0	30.8
Average Age at Death	83.5	86.2	84.0	85.8
<b>Increase in Expected Lifetime</b>	1.4	0.1	2.1	0.1

**Actuarial Cost Method**

The actuarial valuation is prepared using the entry age actuarial cost method (CERL 31453.5). Under the principles of this method, the actuarial present value of the projected benefits of each individual included in the valuation is allocated as a level percentage of the individual's projected compensation between entry age and assumed exit (until maximum retirement age).

For members who transferred between plans, entry age is based on original entry into the system.

The portion of this actuarial present value allocated to a valuation year is called the normal cost. The portion of this actuarial present value not provided for at a valuation date by the sum of (a) the actuarial value of the assets, and (b) the actuarial present value of future normal costs is called the Unfunded Actuarial Accrued Liability (UAAL). The UAAL (or Surplus Funding) is amortized as a level percentage of the projected salaries of present and future members of LACERA over a 30-year period from the valuation date, this is commonly referred to as a "rolling 30 year amortization method".

**Records and Data**

The data used in this valuation consist of financial information and the age, service, and income records for active and inactive members and their survivors. All of the data were supplied by LACERA and are accepted for valuation purposes without audit.

**Replacement of Terminated Members**

The ages and relative salaries at entry of future members are assumed to follow a new entrant distribution based on the pattern of current members. Under this assumption, the normal cost rates for active members will remain fairly stable in future years unless there are changes in the governing law, the actuarial assumptions or the pattern of the new entrants. For Plans which no longer have new members entering (Plan A for safety members, Plans A, B & C for general members), the increasing normal cost rate reflects the maturing of the group.

**Growth in Membership**

For benefit determination purposes, no growth in the membership of LACERA is assumed. For funding purposes, if amortization is required, the total payroll of covered members is assumed to grow due to the combined effects of future wage increases of current active members and the replacement of the current active members by new employees. No growth in the total number of active members is assumed.

**Internal Revenue Code Section 415 Limit**

The Internal Revenue Code Section 415 maximum benefit limitations are not reflected in the valuation for funding purposes. Any limitation is reflected in a member's benefit after retirement.

**County Contributions**

The County contribution rate is set by the Retirement Board based on actuarial valuations.

**Member Contributions**

The member contribution rates vary by entry age and are described in the law. Code references are shown in Appendix B of the valuation report. The methods and assumptions used are detailed later in this section.

The individual member rates by entry age, plan and class are illustrated in Appendix D of the valuation report.

**Valuation of Assets**

The assets are valued using a three-year smoothed method based on the difference between the expected market value and the actual market value of the assets as of the valuation date. The expected market value is the prior year's market value increased with the net increase in the cash flow of funds, all increased with interest during the past fiscal year at the expected investment return rate assumption. The expected market-value, with three-year smoothing valuation basis for all assets was adopted effective June 30, 2000.

**Investment Earnings and Expenses**

The future investment earnings of the assets of LACERA are assumed to accrue at an annual rate of 7.75% compounded annually, net of both investment and administrative expenses. This rate was adopted June 30, 2004 (was 8.00%).

**Post-retirement Benefit Increases**

Post-retirement increases are assumed for the valuation in accordance with the benefits provided as described in Appendix B. These adjustments are assumed payable each year in the future as they are less than the expected increase in the Consumer Price Index of 3.5% per year. This rate was adopted June 30, 2004 (was 4.0%).

**Interest on Member Contributions**

The annual credited interest rate on member contributions is assumed to be 7.75% compounded semi-annually for an annualized rate of 7.90%. This rate was adopted June 30, 2004 (was 8.16%).

**Future Salaries**

The rates of annual salary increase assumed for the purpose of the valuation are illustrated in Table A-5. In addition to increases in salary due to promotions and longevity, this scale includes an assumed 3.75% per annum rate of increase in the general wage level of the membership. These rates were adopted June 30, 2004 (was 4.00% with a higher merit assumption).

Effective June 30, 2000, increases are assumed to occur mid-year (i.e., January 1) and only apply to base salary, excluding megaflex compensation. The mid-year timing reflects that salary increases occur throughout the year, or on average mid-year.

## **Future Salaries (Continued)**

For contributory plans, actual prior year annual compensation is used. For Plan E, annual information was not available. Due to irregular compensation payments now included as pensionable earnings, actual annual pay is preferred over annualizing a single monthly payment amount.

## **Social Security Wage Base**

Plan E members have their benefits offset by an assumed Social Security Benefit. For valuation funding purposes, we need to project the Social Security Benefit. We assume the current Social Security provisions will continue and the annual Wage Base will increase at the rate of 3.75% per year. Note, statutory provisions describe exactly how to compute the offset for purposes of determining a member's offset amount at time of termination or retirement. This rate was adopted June 30, 2004 (was 4.00%).

## **Retirement**

After members attain age 50 (55 for Plan E members) and have ten years of service, they may retire with a benefit commencing immediately. All members except Plan E members, may also retire regardless of age after 20 years of service for safety members and after 30 years of service for general members. The retirement rates vary by age and are shown by plan in Tables A-6 through A-13.

All general members who attain or who have attained age 75 in active service and all safety members who have attained age 60 in active service are assumed to retire immediately.

All deferred vested members are assumed to retire at the later of age 50 and earliest eligibility, except for Plan E who are assumed to retire at 65.

The assumptions regarding termination of employment, early retirement, and unreduced service retirement are treated as a single set of decrements in regards to a particular member. For example, a general member hired at age 30 has a probability to withdraw from LACERA due to death, disability or *other termination of employment* until age 50. After age 50, the member could still withdraw due to death, disability or *retirement*. Thus, in no year during the member's projected employment would they be eligible for both a probability of other termination of employment and a probability of retirement.

The retirement probabilities were revised June 30, 2004.

**Disablement**

The rates of disablement used in the valuation are also illustrated in Tables A-6 through A-13. These rates were revised June 30, 2004.

**Mortality – Other Than Disabled Members**

The same post-retirement mortality rates are used in the valuation for active members, members retired for service, and beneficiaries. These rates are illustrated in Table A-2. Beneficiary mortality is assumed to be the same assumption as healthy members. Beneficiaries are assumed to be of the opposite sex, and have the same mortality as General members. These rates were adopted June 30, 2004.

*Males*

General members: RP-2000 Combined Mortality Table for Males, with ages set back two years.

Safety members: RP-2000 Combined Mortality Table for Males, with ages set back three years.

*Females*

General members: RP-2000 Combined Mortality Table for Females, with ages set back two years.

Safety members: RP-2000 Combined Mortality Table for Females, with ages set back two years.

**Mortality – Disabled Members**

For disabled members, the mortality rates used in the valuation rates are illustrated in Table A-3. These rates were adopted June 30, 2001.

*Males*

General members: RP-2000 Combined Mortality Table for Males, with ages set forward three years.

Safety members: RP-2000 Combined Mortality Table for Males, with no age adjustment.

*Females*

General members: RP-2000 Combined Table for Females with ages set forward one year.

Safety members: RP-2000 Combined Mortality Table for Females with ages set forward three years.

## **Other Employment Terminations**

Tables A-6 to A-13 show, for all ages, the rates assumed in this valuation for future termination from active service other than for death, disability or retirement. These rates do not apply to members eligible for service retirement. These rates were revised June 30, 2004.

Terminating employees may withdraw their contributions immediately upon termination of employment and forfeit the right to further benefits, or they may leave their contributions with LACERA. Former contributing members whose contributions are on deposit may later elect to receive a refund, may return to work or may remain inactive until becoming eligible to receive a retirement benefit under either LACERA or a reciprocal retirement system. All terminating members who are not eligible for vested benefits are assumed to withdraw their contributions immediately.

All terminating members are assumed to not be rehired. Table A-4 gives the assumed probabilities that vested members will withdraw their contributions and elect a refund immediately upon termination and the probability the remaining members will elect a deferred vested benefit. All non-vested members are assumed to elect a refund and withdraw their contributions. These rates were adopted June 30, 2004.

## **Probability of Eligible Survivors**

For members not currently in pay status, 82% of all males and 65% of all females are assumed to have eligible survivors (spouses or qualified domestic partners). Survivors are assumed to be four years younger than male members and four years older than female members. Survivors are assumed to be of the opposite sex as the member. There is no explicit assumption for children's benefits. We believe the survivor benefits based on this assumption are sufficient to cover children's benefits as they occur.

## **Valuation of Vested Terminated Members**

Complete Final Compensation data is not available to estimate the amount of vested benefit for these members. For valuation purposes, we assume the value of their deferred benefit is equal to three times their accumulated normal contributions plus one times their accumulated COLA contributions as of the valuation date.

Since Plan E is non-contributory, the value of the deferred benefit cannot be estimated under this method. Therefore, for Plan E members who are missing compensation data, Final Compensation is estimated as the average amount for all Plan E members who terminated during the same year and had a valid compensation amount. The retirement benefit is then calculated. The value of the deferred benefit is the value of this benefit deferred to age 65.

## **Valuation of Annuity Purchases**

Over 20 years ago, LACERA purchased single life annuities from two insurance companies for some retired members (currently less than 5% of the retired population). The total liability for these members is calculated and then offset by the expected value of the benefit to be paid by the insurance companies.

For affected members, the insurance companies are responsible for:

- (1) Straight life annuity payments
- (2) Statutory COLAs

LACERA is responsible for:

- (1) Benefit payments payable to any beneficiary
- (2) STAR COLAs

## **Member Contribution Rate Assumptions**

The following assumptions summarize the procedures used to compute member contribution rates based on entry age:

In general, the member rate is determined by the present value of the future benefit (PVFB) payable at retirement age, divided by the present value of all future salaries payable between age at entry and retirement age. For these purposes, per the CERL, the:

- A. Annuity factor used for general members is based on a 40% / 60% (was 50% / 50%) blend of the male and female annuity factors using current valuation assumptions. For Safety members it is based on a 90% / 10% (was 100% / 0%) blend of the male and female annuity factors using current valuation assumptions.
- B. The annuity factor used in determining the present value of future benefits (PVFB) at entry age is equal to the life only annuity factor at 7.75% (was 8.0%).
- C. The Final Compensation is based on the salary paid in the year prior to attaining the retirement age.

Example: For a Plan C Member who enters at age 59 or earlier, the Final Compensation at retirement (age 60) will be the monthly average of the annual salaries during age 59.

- D. Member Rates are assumed to increase with entry age. There are a few exceptions at the higher entry ages where the calculated rate is less than the previous entry age (for example, age 53 for General A). In these cases the member contribution rate is adjusted so that it is no less than the value for the previous entry age.



# Los Angeles County Employees Retirement Association

**Table A-1: Summary of Valuation Assumptions as of June 30, 2004**

I. Economic assumptions	
A. General wage increases	3.75% (was 4.00%)
B. Investment earnings	7.75% (was 8.00%)
C. Growth in membership	0.00%
D. Post-retirement benefit increases (varies by plan)	Plan COLA not greater than CPI assumption.
E. CPI inflation assumption	3.50% (was 4.00%)
II. Demographic assumptions	
A. Salary increases due to service	Table A-5
B. Retirement	Tables A-6 to A-13
C. Disablement	Tables A-6 to A-13
D. Mortality for active members after termination and service retired members.	Table A-2
Basis – RP-2000 Combined Mortality Table for respective sexes for general members, as adjusted:	
	Age
<u>Class of Members</u>	<u>Adjustment</u>
General – males	-2 years
General – females	-2 years
Safety – males	-3 years
Safety – females	-2 years
E. Mortality among disabled members	Table A-3
Basis – RP-2000 Combined Mortality Table, as adjusted:	
General – males	+3 years
General – females	+1 year
Safety – males	0 years
Safety – females	+3 years
F. Mortality for beneficiaries.	Table A-2
Basis – Beneficiaries are assumed to have the same mortality as a general member of the opposite sex who has taken a service retirement.	
G. Other terminations of employment	Tables A-6 to A-13
H. Refund of contributions on vested termination	Table A-4



## Los Angeles County Employees Retirement Association

**Table A-2: Mortality for Members Retired for Service**

New Assumptions				
Age	Safety Male	Safety Female	General Male	General Female
20	0.030%	0.019%	0.032%	0.019%
25	0.037%	0.020%	0.037%	0.020%
30	0.038%	0.023%	0.039%	0.023%
35	0.056%	0.039%	0.063%	0.039%
40	0.090%	0.060%	0.096%	0.060%
45	0.122%	0.094%	0.130%	0.094%
50	0.173%	0.143%	0.186%	0.143%
55	0.267%	0.221%	0.292%	0.221%
60	0.469%	0.392%	0.527%	0.392%
65	0.876%	0.765%	1.001%	0.765%
70	1.608%	1.345%	1.787%	1.345%
75	2.728%	2.297%	3.039%	2.297%
80	4.691%	3.760%	5.212%	3.760%
85	8.049%	6.251%	8.972%	6.251%
90	13.604%	10.730%	15.059%	10.730%

Old Assumptions				
Age	Safety Male	Safety Female	General Male	General Female
20	0.030%	0.018%	0.032%	0.018%
25	0.037%	0.024%	0.039%	0.024%
30	0.049%	0.033%	0.052%	0.033%
35	0.069%	0.045%	0.073%	0.045%
40	0.099%	0.063%	0.105%	0.063%
45	0.175%	0.096%	0.186%	0.096%
50	0.313%	0.157%	0.332%	0.157%
55	0.490%	0.241%	0.521%	0.241%
60	0.733%	0.403%	0.778%	0.403%
65	1.247%	0.671%	1.325%	0.671%
70	2.202%	1.177%	2.340%	1.177%
75	3.568%	2.279%	3.791%	2.279%
80	5.926%	4.080%	6.296%	4.080%
85	9.187%	6.642%	9.761%	6.642%
90	13.305%	10.616%	14.136%	10.616%

## Los Angeles County Employees Retirement Association

**Table A-3: Mortality for Members Retired for Disability**

<b>Age</b>	<b>Safety Male</b>	<b>Safety Female</b>	<b>General Male</b>	<b>General Female</b>
20	0.035%	0.020%	0.037%	0.019%
25	0.038%	0.023%	0.039%	0.021%
30	0.044%	0.039%	0.063%	0.031%
35	0.077%	0.060%	0.096%	0.051%
40	0.108%	0.094%	0.130%	0.077%
45	0.151%	0.143%	0.186%	0.122%
50	0.214%	0.221%	0.292%	0.185%
55	0.362%	0.392%	0.527%	0.309%
60	0.675%	0.765%	1.001%	0.581%
65	1.274%	1.345%	1.787%	1.095%
70	2.221%	2.297%	3.039%	1.858%
75	3.783%	3.760%	5.212%	3.097%
80	6.437%	6.251%	8.972%	5.078%
85	11.076%	10.730%	15.059%	8.638%
90	18.341%	17.043%	23.366%	14.460%

## Los Angeles County Employees Retirement Association

**Table A-4: Immediate Refund of Contributions Upon Termination of Employment  
(Excludes Plan E)**

Years of Service	New Assumptions		Old Assumptions	
	Safety	General	Safety	General
0	100%	100%	100%	100%
1	100%	100%	100%	100%
2	100%	100%	100%	100%
3	100%	100%	100%	100%
4	100%	100%	100%	100%
5	35%	45%	0%	35%
6	35%	45%	0%	35%
7	35%	45%	0%	35%
8	33%	44%	0%	35%
9	31%	43%	0%	35%
10	29%	42%	0%	35%
11	27%	41%	0%	35%
12	25%	40%	0%	35%
13	20%	39%	0%	35%
14	15%	38%	0%	35%
15	10%	37%	0%	35%
16	5%	36%	0%	35%
17	0%	35%	0%	35%
18	0%	34%	0%	35%
19	0%	33%	0%	35%
20	0%	32%	0%	35%
21	0%	31%	0%	35%
22	0%	30%	0%	35%
23	0%	24%	0%	35%
24	0%	18%	0%	35%
25	0%	12%	0%	35%
26	0%	6%	0%	35%
27	0%	0%	0%	35%
28	0%	0%	0%	35%
29	0%	0%	0%	35%
30 & Up	0%	0%	0%	35%

# Los Angeles County Employees Retirement Association

**Table A-5: Annual Increase in Salary\***

Years of Service	New Assumptions		Old Assumptions
	Due to Promotion and Longevity	Total Annual Increase*	Total Annual Increase*
<1	6.00%	9.98%	10.24%
1	5.25%	9.20%	9.46%
2	4.50%	8.42%	8.68%
3	3.75%	7.64%	7.90%
4	3.00%	6.86%	7.12%
5	2.50%	6.34%	6.60%
6	2.00%	5.83%	6.08%
7	1.75%	5.57%	5.82%
8	1.50%	5.31%	5.56%
9	1.30%	5.10%	5.35%
10	1.15%	4.94%	5.14%
11	1.00%	4.79%	5.04%
12	0.85%	4.63%	4.94%
13	0.70%	4.48%	4.88%
14	0.60%	4.37%	4.83%
15	0.50%	4.27%	4.78%
16	0.40%	4.17%	4.78%
17	0.35%	4.11%	4.78%
18	0.30%	4.06%	4.78%
19	0.25%	4.01%	4.78%
20 or More	0.25%	4.01%	4.78%

\* The total expected increase in salary is the increase due to promotions and longevity, adjusted for an assumed 3.75% per annum increase (4.00% for the old assumptions) in the general wage level of the membership. The total result is compounded rather than additive.

## Los Angeles County Employees Retirement Association

### Appendix A: Rates of Separation From Active Service Tables A-6 to A-13

A schedule of the probabilities of termination of employment due to the following causes can be found on the following pages:

Service Retirement:	Member retires after meeting age and service requirements for reasons other than disability.
Withdrawal:	Member terminates and elects a refund of member contributions, or a deferred vested retirement benefit.
Service Disability:	Member receives disability retirement; disability is service related.
Ordinary Disability:	Member receives disability retirement; disability is not service related.
Service Death:	Member dies before retirement; death is service related.
Ordinary Death:	Member dies before retirement; death is not service related.

Each rate represents the probability that a member will separate from service at each age due to the particular cause. For example, a rate of 0.0300 for a member's service retirement at age 50 means we assume that 30 out of 1,000 members who are age 50 will retire at that age.

Each table represents the detailed rates needed for each LACERA plan by sex:

Table A-6: General Plan A, B & C Males	A-10: General Plan E Males
A-7: General Plan A, B & C Females	A-11: General Plan E Females
A-8: General Plan D Males	A-12: Safety Plan A & B Males
A-9: General Plan D Females	A-13: Safety Plan A & B Females

# Los Angeles County Employees Retirement Association

**Table A-6: Rate of Separation From Active Service For General Members  
Plans A, B & C - Male**

Age	Service Retirement	Other Terminations	Service Disability	Ordinary Disability	Service Death	Ordinary Death
18	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
19	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
20	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
21	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
22	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
23	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
24	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
25	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
26	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
27	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
28	0.0000	0.0050	0.0002	0.0001	N/A	0.0004
29	0.0000	0.0050	0.0002	0.0001	N/A	0.0005
30	0.0000	0.0050	0.0002	0.0001	N/A	0.0006
31	0.0000	0.0050	0.0002	0.0001	N/A	0.0006
32	0.0000	0.0050	0.0002	0.0001	N/A	0.0007
33	0.0000	0.0050	0.0003	0.0001	N/A	0.0008
34	0.0000	0.0050	0.0003	0.0001	N/A	0.0008
35	0.0000	0.0050	0.0004	0.0001	N/A	0.0009
36	0.0000	0.0050	0.0004	0.0002	N/A	0.0010
37	0.0000	0.0050	0.0005	0.0001	N/A	0.0010
38	0.0000	0.0050	0.0006	0.0002	N/A	0.0011
39	0.0000	0.0050	0.0006	0.0002	N/A	0.0011
40	0.0300	0.0050	0.0006	0.0002	N/A	0.0012
41	0.0300	0.0050	0.0007	0.0003	N/A	0.0013
42	0.0300	0.0050	0.0008	0.0003	N/A	0.0014
43	0.0300	0.0050	0.0009	0.0003	N/A	0.0015
44	0.0300	0.0050	0.0010	0.0004	N/A	0.0016
45	0.0300	0.0050	0.0011	0.0004	N/A	0.0017
46	0.0300	0.0050	0.0012	0.0005	N/A	0.0019
47	0.0300	0.0050	0.0013	0.0005	N/A	0.0020
48	0.0300	0.0050	0.0014	0.0005	N/A	0.0021
49	0.0300	0.0050	0.0016	0.0006	N/A	0.0023
50	0.0300	0.0050	0.0017	0.0006	N/A	0.0024
51	0.0300	0.0050	0.0018	0.0007	N/A	0.0026
52	0.0300	0.0050	0.0020	0.0008	N/A	0.0028
53	0.0300	0.0050	0.0022	0.0008	N/A	0.0030
54	0.0450	0.0050	0.0025	0.0009	N/A	0.0033
55	0.0700	0.0050	0.0027	0.0010	N/A	0.0036
56	0.1000	0.0050	0.0030	0.0011	N/A	0.0040
57	0.1200	0.0050	0.0032	0.0012	N/A	0.0044
58	0.1500	0.0050	0.0036	0.0013	N/A	0.0049
59	0.1800	0.0050	0.0040	0.0015	N/A	0.0054
60	0.2400	0.0050	0.0044	0.0016	N/A	0.0059
61	0.2400	0.0050	0.0048	0.0018	N/A	0.0065
62	0.3500	0.0050	0.0052	0.0019	N/A	0.0070
63	0.2100	0.0050	0.0052	0.0024	N/A	0.0076
64	0.2800	0.0050	0.0052	0.0029	N/A	0.0081
65	0.3500	0.0050	0.0052	0.0034	N/A	0.0086
66	0.2500	0.0050	0.0052	0.0039	N/A	0.0091
67	0.2500	0.0050	0.0052	0.0044	N/A	0.0095
68	0.2500	0.0050	0.0052	0.0049	N/A	0.0099
69	0.2500	0.0050	0.0052	0.0054	N/A	0.0104
70	0.2500	0.0050	0.0052	0.0059	N/A	0.0112
71	0.2500	0.0050	0.0052	0.0064	N/A	0.0123
72	0.2500	0.0050	0.0052	0.0069	N/A	0.0137
73	0.2500	0.0050	0.0052	0.0074	N/A	0.0151
74	0.2500	0.0050	0.0052	0.0079	N/A	0.0169
75	1.0000	0.0000	0.0000	0.0000	N/A	0.0000

## Los Angeles County Employees Retirement Association

**Table A-7: Rate of Separation From Active Service For General Members  
Plans A, B & C - Female**

<u>Age</u>	<u>Service Retirement</u>	<u>Other Terminations</u>	<u>Service Disability</u>	<u>Ordinary Disability</u>	<u>Service Death</u>	<u>Ordinary Death</u>
18	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
19	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
20	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
21	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
22	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
23	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
24	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
25	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
26	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
27	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
28	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
29	0.0000	0.0050	0.0002	0.0001	N/A	0.0002
30	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
31	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
32	0.0000	0.0050	0.0002	0.0001	N/A	0.0003
33	0.0000	0.0050	0.0003	0.0001	N/A	0.0004
34	0.0000	0.0050	0.0003	0.0001	N/A	0.0004
35	0.0000	0.0050	0.0004	0.0001	N/A	0.0005
36	0.0000	0.0050	0.0004	0.0002	N/A	0.0005
37	0.0000	0.0050	0.0005	0.0001	N/A	0.0006
38	0.0000	0.0050	0.0006	0.0002	N/A	0.0006
39	0.0000	0.0050	0.0006	0.0002	N/A	0.0006
40	0.0300	0.0050	0.0006	0.0002	N/A	0.0007
41	0.0300	0.0050	0.0007	0.0003	N/A	0.0008
42	0.0300	0.0050	0.0008	0.0003	N/A	0.0009
43	0.0300	0.0050	0.0009	0.0003	N/A	0.0009
44	0.0300	0.0050	0.0010	0.0004	N/A	0.0010
45	0.0300	0.0050	0.0011	0.0004	N/A	0.0011
46	0.0300	0.0050	0.0012	0.0005	N/A	0.0012
47	0.0300	0.0050	0.0013	0.0005	N/A	0.0013
48	0.0300	0.0050	0.0014	0.0006	N/A	0.0014
49	0.0300	0.0050	0.0014	0.0006	N/A	0.0016
50	0.0300	0.0050	0.0016	0.0006	N/A	0.0017
51	0.0300	0.0050	0.0017	0.0007	N/A	0.0018
52	0.0300	0.0050	0.0018	0.0008	N/A	0.0020
53	0.0400	0.0050	0.0019	0.0009	N/A	0.0021
54	0.0700	0.0050	0.0020	0.0010	N/A	0.0023
55	0.0900	0.0050	0.0022	0.0011	N/A	0.0025
56	0.1000	0.0050	0.0022	0.0011	N/A	0.0028
57	0.1200	0.0050	0.0024	0.0012	N/A	0.0030
58	0.1500	0.0050	0.0027	0.0014	N/A	0.0033
59	0.1800	0.0050	0.0030	0.0015	N/A	0.0036
60	0.2000	0.0050	0.0034	0.0017	N/A	0.0039
61	0.2000	0.0050	0.0037	0.0019	N/A	0.0043
62	0.2800	0.0050	0.0040	0.0020	N/A	0.0047
63	0.2200	0.0050	0.0043	0.0022	N/A	0.0050
64	0.2200	0.0050	0.0047	0.0024	N/A	0.0054
65	0.3000	0.0050	0.0051	0.0026	N/A	0.0058
66	0.2400	0.0050	0.0056	0.0028	N/A	0.0062
67	0.2400	0.0050	0.0061	0.0030	N/A	0.0066
68	0.2400	0.0050	0.0066	0.0032	N/A	0.0069
69	0.2400	0.0050	0.0072	0.0034	N/A	0.0073
70	0.2400	0.0050	0.0072	0.0036	N/A	0.0076
71	0.2400	0.0050	0.0072	0.0038	N/A	0.0079
72	0.2400	0.0050	0.0072	0.0040	N/A	0.0085
73	0.2400	0.0050	0.0072	0.0042	N/A	0.0093
74	0.2400	0.0050	0.0072	0.0044	N/A	0.0103
75	1.0000	0.0000	0.0000	0.0000	N/A	0.0000

# Los Angeles County Employees Retirement Association

**Table A-8: Rate of Separation From Active Service For General Members  
Plan D - Male**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0002	0.0001	N/A	0.0003	0	0.0700
19	0.0000	0.0002	0.0001	N/A	0.0004	1	0.0550
20	0.0000	0.0002	0.0001	N/A	0.0004	2	0.0425
21	0.0000	0.0002	0.0001	N/A	0.0004	3	0.0350
22	0.0000	0.0002	0.0001	N/A	0.0004	4	0.0300
23	0.0000	0.0002	0.0001	N/A	0.0004	5	0.0283
24	0.0000	0.0002	0.0001	N/A	0.0004	6	0.0267
25	0.0000	0.0002	0.0001	N/A	0.0004	7	0.0250
26	0.0000	0.0002	0.0001	N/A	0.0004	8	0.0240
27	0.0000	0.0002	0.0001	N/A	0.0004	9	0.0230
28	0.0000	0.0002	0.0001	N/A	0.0004	10	0.0220
29	0.0000	0.0002	0.0001	N/A	0.0005	11	0.0210
30	0.0000	0.0002	0.0001	N/A	0.0006	12	0.0200
31	0.0000	0.0002	0.0001	N/A	0.0006	13	0.0190
32	0.0000	0.0002	0.0001	N/A	0.0007	14	0.0180
33	0.0000	0.0003	0.0001	N/A	0.0008	15	0.0170
34	0.0000	0.0003	0.0001	N/A	0.0008	16	0.0160
35	0.0000	0.0004	0.0001	N/A	0.0009	17	0.0150
36	0.0000	0.0004	0.0002	N/A	0.0010	18	0.0144
37	0.0000	0.0005	0.0001	N/A	0.0010	19	0.0138
38	0.0000	0.0006	0.0002	N/A	0.0011	20	0.0132
39	0.0000	0.0006	0.0002	N/A	0.0011	21	0.0126
40	0.0200	0.0006	0.0002	N/A	0.0012	22	0.0120
41	0.0200	0.0007	0.0003	N/A	0.0013	23	0.0116
42	0.0200	0.0008	0.0003	N/A	0.0014	24	0.0112
43	0.0200	0.0009	0.0003	N/A	0.0015	25	0.0108
44	0.0200	0.0010	0.0004	N/A	0.0016	26	0.0104
45	0.0200	0.0011	0.0004	N/A	0.0017	27	0.0100
46	0.0200	0.0012	0.0005	N/A	0.0019	28	0.0100
47	0.0200	0.0013	0.0005	N/A	0.0020	29	0.0100
48	0.0200	0.0014	0.0005	N/A	0.0021	30 & Above	0.0000
49	0.0200	0.0016	0.0006	N/A	0.0023		
50	0.0200	0.0017	0.0006	N/A	0.0024		
51	0.0200	0.0018	0.0007	N/A	0.0026		
52	0.0200	0.0020	0.0008	N/A	0.0028		
53	0.0200	0.0022	0.0008	N/A	0.0030		
54	0.0200	0.0025	0.0009	N/A	0.0033		
55	0.0300	0.0027	0.0010	N/A	0.0036		
56	0.0300	0.0030	0.0011	N/A	0.0040		
57	0.0300	0.0032	0.0012	N/A	0.0044		
58	0.0300	0.0036	0.0013	N/A	0.0049		
59	0.0400	0.0040	0.0015	N/A	0.0054		
60	0.0500	0.0044	0.0016	N/A	0.0059		
61	0.0500	0.0048	0.0018	N/A	0.0065		
62	0.1000	0.0052	0.0019	N/A	0.0070		
63	0.0800	0.0052	0.0024	N/A	0.0076		
64	0.1000	0.0052	0.0029	N/A	0.0081		
65	0.2000	0.0052	0.0034	N/A	0.0086		
66	0.1500	0.0052	0.0039	N/A	0.0091		
67	0.1500	0.0052	0.0044	N/A	0.0095		
68	0.1500	0.0052	0.0049	N/A	0.0099		
69	0.1500	0.0052	0.0054	N/A	0.0104		
70	0.2000	0.0052	0.0059	N/A	0.0112		
71	0.2000	0.0052	0.0064	N/A	0.0123		
72	0.2000	0.0052	0.0069	N/A	0.0137		
73	0.2000	0.0052	0.0074	N/A	0.0151		
74	0.2000	0.0052	0.0079	N/A	0.0169		
75	1.0000	0.0000	0.0000	N/A	0.0000		



## Los Angeles County Employees Retirement Association

**Table A-9: Rate of Separation From Active Service For General Members  
Plan D - Female**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0002	0.0001	N/A	0.0002	0	0.0700
19	0.0000	0.0002	0.0001	N/A	0.0002	1	0.0550
20	0.0000	0.0002	0.0001	N/A	0.0002	2	0.0425
21	0.0000	0.0002	0.0001	N/A	0.0002	3	0.0350
22	0.0000	0.0002	0.0001	N/A	0.0002	4	0.0300
23	0.0000	0.0002	0.0001	N/A	0.0002	5	0.0283
24	0.0000	0.0002	0.0001	N/A	0.0002	6	0.0267
25	0.0000	0.0002	0.0001	N/A	0.0002	7	0.0250
26	0.0000	0.0002	0.0001	N/A	0.0002	8	0.0240
27	0.0000	0.0002	0.0001	N/A	0.0002	9	0.0230
28	0.0000	0.0002	0.0001	N/A	0.0002	10	0.0220
29	0.0000	0.0002	0.0001	N/A	0.0002	11	0.0210
30	0.0000	0.0002	0.0001	N/A	0.0003	12	0.0200
31	0.0000	0.0002	0.0001	N/A	0.0003	13	0.0190
32	0.0000	0.0002	0.0001	N/A	0.0003	14	0.0180
33	0.0000	0.0003	0.0001	N/A	0.0004	15	0.0170
34	0.0000	0.0003	0.0001	N/A	0.0004	16	0.0160
35	0.0000	0.0004	0.0001	N/A	0.0005	17	0.0150
36	0.0000	0.0004	0.0002	N/A	0.0005	18	0.0144
37	0.0000	0.0005	0.0001	N/A	0.0006	19	0.0138
38	0.0000	0.0006	0.0002	N/A	0.0006	20	0.0132
39	0.0000	0.0006	0.0002	N/A	0.0006	21	0.0126
40	0.0200	0.0006	0.0002	N/A	0.0007	22	0.0120
41	0.0200	0.0007	0.0003	N/A	0.0008	23	0.0116
42	0.0200	0.0008	0.0003	N/A	0.0009	24	0.0112
43	0.0200	0.0009	0.0003	N/A	0.0009	25	0.0108
44	0.0200	0.0010	0.0004	N/A	0.0010	26	0.0104
45	0.0200	0.0011	0.0004	N/A	0.0011	27	0.0100
46	0.0200	0.0012	0.0005	N/A	0.0012	28	0.0100
47	0.0200	0.0013	0.0005	N/A	0.0013	29	0.0100
48	0.0200	0.0014	0.0006	N/A	0.0014	30 & Above	0.0000
49	0.0200	0.0014	0.0006	N/A	0.0016		
50	0.0200	0.0016	0.0006	N/A	0.0017		
51	0.0200	0.0017	0.0007	N/A	0.0018		
52	0.0200	0.0018	0.0008	N/A	0.0020		
53	0.0200	0.0019	0.0009	N/A	0.0021		
54	0.0200	0.0020	0.0010	N/A	0.0023		
55	0.0300	0.0022	0.0011	N/A	0.0025		
56	0.0300	0.0022	0.0011	N/A	0.0028		
57	0.0300	0.0024	0.0012	N/A	0.0030		
58	0.0300	0.0027	0.0014	N/A	0.0033		
59	0.0400	0.0030	0.0015	N/A	0.0036		
60	0.0600	0.0034	0.0017	N/A	0.0039		
61	0.0600	0.0037	0.0019	N/A	0.0043		
62	0.0800	0.0040	0.0020	N/A	0.0047		
63	0.0800	0.0043	0.0022	N/A	0.0050		
64	0.1200	0.0047	0.0024	N/A	0.0054		
65	0.2200	0.0051	0.0026	N/A	0.0058		
66	0.1800	0.0056	0.0028	N/A	0.0062		
67	0.1300	0.0061	0.0030	N/A	0.0066		
68	0.2000	0.0066	0.0032	N/A	0.0069		
69	0.2000	0.0072	0.0034	N/A	0.0073		
70	0.2000	0.0072	0.0036	N/A	0.0076		
71	0.2000	0.0072	0.0038	N/A	0.0079		
72	0.2000	0.0072	0.0040	N/A	0.0085		
73	0.2000	0.0072	0.0042	N/A	0.0093		
74	0.2000	0.0072	0.0044	N/A	0.0103		
75	1.0000	0.0000	0.0000	N/A	0.0000		

# Los Angeles County Employees Retirement Association

**Table A-10: Rate of Separation From Active Service For General Members  
Plan E - Male**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	N/A	N/A	N/A	0.0003	0	0.1300
19	0.0000	N/A	N/A	N/A	0.0004	1	0.0700
20	0.0000	N/A	N/A	N/A	0.0004	2	0.0600
21	0.0000	N/A	N/A	N/A	0.0004	3	0.0500
22	0.0000	N/A	N/A	N/A	0.0004	4	0.0400
23	0.0000	N/A	N/A	N/A	0.0004	5	0.0373
24	0.0000	N/A	N/A	N/A	0.0004	6	0.0347
25	0.0000	N/A	N/A	N/A	0.0004	7	0.0320
26	0.0000	N/A	N/A	N/A	0.0004	8	0.0304
27	0.0000	N/A	N/A	N/A	0.0004	9	0.0288
28	0.0000	N/A	N/A	N/A	0.0004	10	0.0272
29	0.0000	N/A	N/A	N/A	0.0005	11	0.0256
30	0.0000	N/A	N/A	N/A	0.0006	12	0.0240
31	0.0000	N/A	N/A	N/A	0.0006	13	0.0232
32	0.0000	N/A	N/A	N/A	0.0007	14	0.0224
33	0.0000	N/A	N/A	N/A	0.0008	15	0.0216
34	0.0000	N/A	N/A	N/A	0.0008	16	0.0208
35	0.0000	N/A	N/A	N/A	0.0009	17	0.0200
36	0.0000	N/A	N/A	N/A	0.0010	18	0.0196
37	0.0000	N/A	N/A	N/A	0.0010	19	0.0192
38	0.0000	N/A	N/A	N/A	0.0011	20	0.0188
39	0.0000	N/A	N/A	N/A	0.0011	21	0.0184
40	0.0000	N/A	N/A	N/A	0.0012	22	0.0180
41	0.0000	N/A	N/A	N/A	0.0013	23	0.0176
42	0.0000	N/A	N/A	N/A	0.0014	24	0.0172
43	0.0000	N/A	N/A	N/A	0.0015	25	0.0168
44	0.0000	N/A	N/A	N/A	0.0016	26	0.0164
45	0.0000	N/A	N/A	N/A	0.0017	27	0.0160
46	0.0000	N/A	N/A	N/A	0.0019	28	0.0160
47	0.0000	N/A	N/A	N/A	0.0020	29	0.0160
48	0.0000	N/A	N/A	N/A	0.0021	30 & Above	0.0000
49	0.0000	N/A	N/A	N/A	0.0023		
50	0.0000	N/A	N/A	N/A	0.0024		
51	0.0000	N/A	N/A	N/A	0.0026		
52	0.0000	N/A	N/A	N/A	0.0028		
53	0.0000	N/A	N/A	N/A	0.0030		
54	0.0000	N/A	N/A	N/A	0.0033		
55	0.0300	N/A	N/A	N/A	0.0036		
56	0.0300	N/A	N/A	N/A	0.0040		
57	0.0300	N/A	N/A	N/A	0.0044		
58	0.0300	N/A	N/A	N/A	0.0049		
59	0.0300	N/A	N/A	N/A	0.0054		
60	0.0300	N/A	N/A	N/A	0.0059		
61	0.0600	N/A	N/A	N/A	0.0065		
62	0.1100	N/A	N/A	N/A	0.0070		
63	0.0700	N/A	N/A	N/A	0.0076		
64	0.1400	N/A	N/A	N/A	0.0081		
65	0.2600	N/A	N/A	N/A	0.0086		
66	0.1700	N/A	N/A	N/A	0.0091		
67	0.1700	N/A	N/A	N/A	0.0095		
68	0.1700	N/A	N/A	N/A	0.0099		
69	0.1700	N/A	N/A	N/A	0.0104		
70	0.2500	N/A	N/A	N/A	0.0112		
71	0.2500	N/A	N/A	N/A	0.0123		
72	0.2500	N/A	N/A	N/A	0.0137		
73	0.2500	N/A	N/A	N/A	0.0151		
74	0.2500	N/A	N/A	N/A	0.0169		
75	1.0000	N/A	N/A	N/A	0.0000		

## Los Angeles County Employees Retirement Association

**Table A-11: Rate of Separation From Active Service For General Members  
Plan E - Female**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	N/A	N/A	N/A	0.0002	0	0.1300
19	0.0000	N/A	N/A	N/A	0.0002	1	0.0700
20	0.0000	N/A	N/A	N/A	0.0002	2	0.0600
21	0.0000	N/A	N/A	N/A	0.0002	3	0.0500
22	0.0000	N/A	N/A	N/A	0.0002	4	0.0400
23	0.0000	N/A	N/A	N/A	0.0002	5	0.0373
24	0.0000	N/A	N/A	N/A	0.0002	6	0.0347
25	0.0000	N/A	N/A	N/A	0.0002	7	0.0320
26	0.0000	N/A	N/A	N/A	0.0002	8	0.0304
27	0.0000	N/A	N/A	N/A	0.0002	9	0.0288
28	0.0000	N/A	N/A	N/A	0.0002	10	0.0272
29	0.0000	N/A	N/A	N/A	0.0002	11	0.0256
30	0.0000	N/A	N/A	N/A	0.0003	12	0.0240
31	0.0000	N/A	N/A	N/A	0.0003	13	0.0232
32	0.0000	N/A	N/A	N/A	0.0003	14	0.0224
33	0.0000	N/A	N/A	N/A	0.0004	15	0.0216
34	0.0000	N/A	N/A	N/A	0.0004	16	0.0208
35	0.0000	N/A	N/A	N/A	0.0005	17	0.0200
36	0.0000	N/A	N/A	N/A	0.0005	18	0.0196
37	0.0000	N/A	N/A	N/A	0.0006	19	0.0192
38	0.0000	N/A	N/A	N/A	0.0006	20	0.0188
39	0.0000	N/A	N/A	N/A	0.0006	21	0.0184
40	0.0000	N/A	N/A	N/A	0.0007	22	0.0180
41	0.0000	N/A	N/A	N/A	0.0008	23	0.0176
42	0.0000	N/A	N/A	N/A	0.0009	24	0.0172
43	0.0000	N/A	N/A	N/A	0.0009	25	0.0168
44	0.0000	N/A	N/A	N/A	0.0010	26	0.0164
45	0.0000	N/A	N/A	N/A	0.0011	27	0.0160
46	0.0000	N/A	N/A	N/A	0.0012	28	0.0160
47	0.0000	N/A	N/A	N/A	0.0013	29	0.0160
48	0.0000	N/A	N/A	N/A	0.0014	30 & Above	0.0000
49	0.0000	N/A	N/A	N/A	0.0016		
50	0.0000	N/A	N/A	N/A	0.0017		
51	0.0000	N/A	N/A	N/A	0.0018		
52	0.0000	N/A	N/A	N/A	0.0020		
53	0.0000	N/A	N/A	N/A	0.0021		
54	0.0000	N/A	N/A	N/A	0.0023		
55	0.0400	N/A	N/A	N/A	0.0025		
56	0.0400	N/A	N/A	N/A	0.0028		
57	0.0400	N/A	N/A	N/A	0.0030		
58	0.0400	N/A	N/A	N/A	0.0033		
59	0.0400	N/A	N/A	N/A	0.0036		
60	0.0400	N/A	N/A	N/A	0.0039		
61	0.0600	N/A	N/A	N/A	0.0043		
62	0.0900	N/A	N/A	N/A	0.0047		
63	0.0600	N/A	N/A	N/A	0.0050		
64	0.1500	N/A	N/A	N/A	0.0054		
65	0.2500	N/A	N/A	N/A	0.0058		
66	0.1500	N/A	N/A	N/A	0.0062		
67	0.1500	N/A	N/A	N/A	0.0066		
68	0.1500	N/A	N/A	N/A	0.0069		
69	0.1500	N/A	N/A	N/A	0.0073		
70	0.2500	N/A	N/A	N/A	0.0076		
71	0.2500	N/A	N/A	N/A	0.0079		
72	0.2500	N/A	N/A	N/A	0.0085		
73	0.2500	N/A	N/A	N/A	0.0093		
74	0.2500	N/A	N/A	N/A	0.0103		
75	1.0000	N/A	N/A	N/A	0.0000		

## Los Angeles County Employees Retirement Association

**Table A-12: Rate of Separation From Active Service For Safety Members  
Plan A & B - Male**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0050	0.0003	0.0001	0.0003	0	0.0400
19	0.0000	0.0050	0.0003	0.0001	0.0003	1	0.0350
20	0.0000	0.0050	0.0003	0.0001	0.0003	2	0.0300
21	0.0000	0.0050	0.0003	0.0001	0.0003	3	0.0250
22	0.0000	0.0050	0.0003	0.0001	0.0003	4	0.0150
23	0.0000	0.0050	0.0003	0.0001	0.0003	5	0.0133
24	0.0000	0.0050	0.0003	0.0001	0.0003	6	0.0117
25	0.0000	0.0050	0.0003	0.0001	0.0003	7	0.0100
26	0.0000	0.0050	0.0003	0.0001	0.0003	8	0.0092
27	0.0000	0.0050	0.0003	0.0001	0.0003	9	0.0084
28	0.0000	0.0050	0.0003	0.0001	0.0003	10	0.0076
29	0.0000	0.0050	0.0003	0.0001	0.0003	11	0.0068
30	0.0000	0.0050	0.0003	0.0001	0.0004	12	0.0060
31	0.0000	0.0050	0.0003	0.0001	0.0004	13	0.0056
32	0.0000	0.0050	0.0003	0.0001	0.0004	14	0.0052
33	0.0000	0.0052	0.0003	0.0001	0.0004	15	0.0048
34	0.0000	0.0054	0.0003	0.0001	0.0004	16	0.0044
35	0.0000	0.0056	0.0003	0.0001	0.0004	17	0.0040
36	0.0000	0.0058	0.0003	0.0001	0.0004	18	0.0032
37	0.0000	0.0060	0.0004	0.0001	0.0004	19	0.0024
38	0.0000	0.0064	0.0004	0.0001	0.0004	20 & Above	0.0000
39	0.0000	0.0068	0.0004	0.0001	0.0004		
40	0.0100	0.0072	0.0004	0.0001	0.0005		
41	0.0100	0.0076	0.0004	0.0001	0.0006		
42	0.0100	0.0080	0.0005	0.0001	0.0006		
43	0.0100	0.0088	0.0005	0.0001	0.0007		
44	0.0100	0.0096	0.0005	0.0001	0.0008		
45	0.0100	0.0104	0.0006	0.0001	0.0008		
46	0.0100	0.0112	0.0006	0.0001	0.0009		
47	0.0100	0.0120	0.0007	0.0001	0.0010		
48	0.0100	0.0136	0.0007	0.0001	0.0010		
49	0.0100	0.0152	0.0008	0.0001	0.0011		
50	0.0100	0.0168	0.0014	0.0001	0.0011		
51	0.0200	0.0184	0.0019	0.0001	0.0012		
52	0.0250	0.0200	0.0025	0.0001	0.0013		
53	0.0300	0.0300	0.0030	0.0001	0.0014		
54	0.1200	0.0500	0.0036	0.0001	0.0015		
55	0.2400	0.1500	0.0036	0.0001	0.0016		
56	0.1800	0.1500	0.0036	0.0001	0.0017		
57	0.1800	0.1500	0.0036	0.0001	0.0019		
58	0.2000	0.1500	0.0036	0.0001	0.0020		
59	0.3000	0.1500	0.0036	0.0001	0.0021		
60	1.0000	0.0000	0.0038	0.0000	0.0000		

## Los Angeles County Employees Retirement Association

**Table A-13: Rate of Separation From Active Service For Safety Members  
Plan A & B - Female**

Age	Service Retirement	Service Disability	Ordinary Disability	Service Death	Ordinary Death	Years of Service	Other Terminations
18	0.0000	0.0050	0.0006	0.0001	0.0002	0	0.0400
19	0.0000	0.0050	0.0006	0.0001	0.0002	1	0.0350
20	0.0000	0.0050	0.0006	0.0001	0.0002	2	0.0300
21	0.0000	0.0050	0.0006	0.0001	0.0002	3	0.0250
22	0.0000	0.0050	0.0006	0.0001	0.0002	4	0.0150
23	0.0000	0.0050	0.0006	0.0001	0.0002	5	0.0133
24	0.0000	0.0050	0.0006	0.0001	0.0002	6	0.0117
25	0.0000	0.0050	0.0006	0.0001	0.0002	7	0.0100
26	0.0000	0.0050	0.0006	0.0001	0.0002	8	0.0092
27	0.0000	0.0050	0.0006	0.0001	0.0002	9	0.0084
28	0.0000	0.0050	0.0006	0.0001	0.0002	10	0.0076
29	0.0000	0.0050	0.0006	0.0001	0.0002	11	0.0068
30	0.0000	0.0060	0.0006	0.0001	0.0003	12	0.0060
31	0.0000	0.0070	0.0006	0.0001	0.0003	13	0.0056
32	0.0000	0.0080	0.0006	0.0001	0.0003	14	0.0052
33	0.0000	0.0090	0.0006	0.0001	0.0004	15	0.0048
34	0.0000	0.0100	0.0006	0.0001	0.0004	16	0.0044
35	0.0000	0.0110	0.0008	0.0001	0.0005	17	0.0040
36	0.0000	0.0120	0.0008	0.0001	0.0005	18	0.0032
37	0.0000	0.0125	0.0008	0.0001	0.0006	19	0.0024
38	0.0000	0.0130	0.0008	0.0001	0.0006	20 & Above	0.0000
39	0.0000	0.0135	0.0008	0.0001	0.0006		
40	0.0500	0.0140	0.0010	0.0001	0.0007		
41	0.0500	0.0145	0.0010	0.0001	0.0008		
42	0.0500	0.0150	0.0010	0.0001	0.0009		
43	0.0500	0.0155	0.0010	0.0001	0.0009		
44	0.0500	0.0160	0.0012	0.0001	0.0010		
45	0.0500	0.0165	0.0012	0.0001	0.0011		
46	0.0500	0.0170	0.0014	0.0001	0.0012		
47	0.0500	0.0175	0.0014	0.0001	0.0013		
48	0.0500	0.0180	0.0016	0.0001	0.0014		
49	0.0500	0.0185	0.0020	0.0001	0.0016		
50	0.0500	0.0190	0.0022	0.0001	0.0017		
51	0.0300	0.0300	0.0026	0.0001	0.0018		
52	0.0300	0.0350	0.0028	0.0001	0.0020		
53	0.0500	0.0400	0.0034	0.0001	0.0021		
54	0.1200	0.0450	0.0040	0.0001	0.0023		
55	0.2200	0.0700	0.0048	0.0001	0.0025		
56	0.1800	0.1200	0.0054	0.0001	0.0028		
57	0.2400	0.1200	0.0060	0.0001	0.0030		
58	0.3200	0.1200	0.0066	0.0001	0.0033		
59	0.4000	0.1200	0.0072	0.0001	0.0036		
60	1.0000	0.0000	0.0078	0.0000	0.0000		

# Los Angeles County Employees Retirement Association

## Appendix B: Summary of Plan Provisions

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All actuarial calculations are based on our understanding of the statutes governing the LACERA as contained in the County Employees Retirement Plan (CERL) of 1937, with provisions adopted by the LACERA Board, effective through July 1, 2002. The benefit and contribution provisions of this law are summarized briefly below, along with corresponding references to the State Code. This summary does not attempt to cover all the detailed provisions of the law. In addition to those benefits in effect through July 1, 2003, we have also reflected the new domestic partner provisions in this valuation.

### Government Code Sections or Board of Investments Bylaws

### MEMBERSHIP

Permanent employees of Los Angeles County (County) and participating districts who work  $\frac{3}{4}$  time or more are eligible for membership in LACERA. (31551, 31552, Bylaws)

Employees eligible for safety membership (law enforcement, fire fighting and lifeguards) become safety members on the first day of the month after date of hire. (31558)

All other employees become general members on the first day of the month after date of hire, or the first day of the month after they make an election of either Plan D or Plan E, depending on the law in effect at that time. (31493, 31493.5, 31493.6, Bylaws)

Elective officers become members on the first day of the month after filing a declaration with the Board of Retirement (Board). (31553, 31562)

General members in Plan E may transfer all their Plan E service credit to Plan D during an approved transfer period by making the required contributions. Transferred members relinquish, waive, and forfeit any and all vested or accrued benefits available under any other retirement plan and are entitled only to the benefits of Plan D.

### RETIREMENT PLANS

The County has established seven defined benefit plans (General Plans A, B, C, D and E and Safety Plans A and B) and two defined contribution plans (General Plan F and Safety Plan F) based on a member's date of entry into LACERA. (31494.1, 31494.3)

**Plan A:** General and safety members - prior to September 1977.

**Plan B:** General members – September 1977 through September 1978. Safety members – September 1977 to present.

**Plan C:** General members – October 1978 through May 1979.

## **RETIREMENT PLANS (Continued)**

<b>Plan D:</b>	General members – Hired June 1979 through January 3, 1982; and those hired on or after January 4, 1982 and elect Plan D instead of Plan E; or, former Plan E general members who elected to transfer to Plan D.	
<b>Plan E:</b>	General members – hired on or after January 4, 1982, unless they elect Plan D; or, former general members in Plans A-D who elected to transfer to Plan E.	(31487, 31496)
<b>Plan F:</b>	General members in Plan D and safety members in Plan B who first became members on or after January 1, 1990, and are subject to the limitations set forth in Section 415 of the Internal Revenue Code of 1986. Currently there are no members participating in Plan F. No further description of Plan F is included here.	(31510)

## **MEMBER CONTRIBUTIONS**

<b>Plans A-D:</b>	Contributions are based on the entry age and class of each member and are required of all members in Plans A, B, C, and D. Current member rates are shown in Appendix D.	
	Contributions cease when general members are credited with 30 years of service in a contributory plan provided they were members of LACERA or a reciprocal system on March 7, 1973, and continuously thereafter. All safety member are eligible for the 30-year cessation of contributions.	(31625.2, 31836.1)
	Interest is credited to contributions semiannually on June 30 and December 31 at an interest rate set by the Board of Investments on amounts that have been on deposit for at least six months.	(31591, 31700)

## **EMPLOYER CONTRIBUTIONS**

The employer (County or district) contributes to the retirement fund a percent of the total compensation provided for all members based on an actuarial investigation, valuation and recommendation of the actuary.	(31453, 31454 31581)
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## **SERVICE RETIREMENT ALLOWANCE**

<b><u>Eligibility:</u></b>		(31672)
<b>Plans A- D:</b>	<b>General members:</b> Age 50 with 10 years of County service; Any age with 30 years of service; or Age 70 regardless of service.	
	<b>Safety members:</b> Age 50 with 10 years of County service; Any age with 20 years of service; or Age 60 regardless of service (Mandatory retirement age for members hired before April 1, 1997). No mandatory retirement for members hired on or after April 1, 1997.	(31662.4, 31662.6, 31663.25)
<b>Plan E:</b>	Age 65 with 10 years of service. A reduced benefit is also payable at age 55 with 10 years of service.	(31491) .
<b><u>Final Compensation:</u></b>		
<b>Plans A-D:</b>	Monthly average of a member's compensation during the last year of service.	(31462.3, 31461.45)
<b>Plan E:</b>	Monthly average of a member's compensation for the last three years of service.	(31676.11)
The amount of compensation that is taken into account in computing benefits payable to any person who first becomes a member on or after July 1, 1996, shall not exceed the dollar limitations in Section 401(a)(17) of Title 26 of the US Code.		(31671)
<b><u>Monthly Allowance:</u></b>		
	<b>Safety members:</b> 1/50 x Final Compensation x Safety age factor x Years of service. (The Safety Plan A and Safety Plan B age factors are the same.)	(31664)
<b>Plans A-D:</b>	<b>General members:</b> 1/60 x Final Compensation x a Plan specific age factor x years of service.	(31676.1) (31676.11) (31676.14)



**SERVICE RETIREMENT ALLOWANCE (Continued)**

- Plan E:**                      **General members: (a)+(b)-(c) where:**
- (a)     2% x Final Compensation x (Years of Service, (up to 35 years), plus (31491,
  - (b)     1 % x Final Compensation x Years of Service in excess of 35 (up to 10) 31491.3 (b)&(c))
  - (c)     Estimated Primary Insurance Amount (PIA) x Years of Covered Service (up to 35) divided by 35.
- The PIA is calculated based on certain assumptions specified by statute, and an assumed Social Security retirement age of 62.
- If retirement occurs prior to age 65, benefit amount is adjusted by an actuarial equivalent factor (see Sample Plan Age Factors).

**Social Security Integration:**

- Plans A-C:**                      **General Members:** (31808)  
For County service covered by Social Security prior to January 1, 1983, the 1/60 factor is replaced by 1/90 for the first \$350 of compensation.
- Plan D:**                      The 1/90 factor is applied to the first \$1,050 of compensation.

**Sample Plan Age Factors**

Plan	Age 50	Age 55	Age 60	Age 65 & Up	
General A	0.885	1.169	1.464	1.567	(31676.14)
General B	0.745	1.000	1.309	1.567	(31676.11)
General C&D	0.709	0.895	1.150	1.459	(31676.1)
General E	N/A	0.375	0.601	1.000	(31491.3(a))
Safety A&B	1.000	1.310	1.310	1.310	(31664)

**Maximum Allowance:**

- Plans A-D:**                      Allowance may not exceed 100% of final compensation.
- Plan E:**                      The sum of the normal retirement allowance and the estimated PIA cannot exceed 70% of Final Compensation for a member with 35 or less years of service, and cannot exceed 80% of Final Compensation if service exceeds 35 years. (31491)



**SERVICE RETIREMENT ALLOWANCE (Continued)**

**Unmodified Retirement Allowance (Normal Form):**

<b>Plans A-D:</b>	Life Annuity payable to retired member with 65% continuance to an eligible survivor (or eligible children).	(31760.12, 31785.4)
<b>Plan E:</b>	Life Annuity payable to retired member with 55% continuance to an eligible survivor (or eligible children).	(31491, 31492.1)
Eligible survivor includes certain domestic partners.		(31780.2)

**Optional Retirement Allowance:**

A member may elect to have the actuarial equivalent of the service or disability retirement allowance applied to a lesser retirement allowance during the retired member's life in order to provide an optional survivor allowance. (31760.1,  
31785)  
(31492)

<b>Option 1:</b>	Member's allowance is reduced to pay a cash refund of any unpaid annuity payments (up to the amount of the member's contributions at retirement) to the member's estate or to a beneficiary having an insurable interest in the life of the member.	(31761)
<b>Option 2:</b>	100% of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member.	(31762)
<b>Option 3:</b>	50% of member's reduced allowance is payable to a surviving spouse or beneficiary having an insurable interest in the life of the member.	(31763)
<b>Option 4:</b>	Other % of member's reduced allowance is payable to a surviving spouse or beneficiary(ies) having an insurable interest in the life of the member.	(31764)

A member may not revoke and name another beneficiary if the member elects Option 2, 3 or 4. (31782)

## SERVICE RETIREMENT ALLOWANCE (Continued)

<b>Pension: Advance Option</b>	The Pension Advance Option is available to members who are fully insured under Social Security for the purpose of coordinating a member's retirement allowance with benefits receivable from Social Security. It is not available to disability retirees or members who elect Option 2, 3 or 4. The allowance is increased prior to age 62 and then reduced after 62 by amounts which have equivalent actuarial values. The automatic 65% continuance for eligible spouses of members who elect the Pension Advance Option is based on the unmodified allowance the member would have received if the member had not elected the option.	(31810, 31811)
	All allowances are made on a pro-rata basis (based on the number of days in that month) if not in effect for the entire month as in the month of death or the month of retirement.	(31600)

## SERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE

<b><u>Eligibility:</u></b>		(31720, 31720.5)
<b>Plans A-D:</b>	Any age or years of service; disability must result from occupational injury or disease, and member must be permanently incapacitated for the performance of duty.	
<b>Plan E:</b>	Not available under Plan E.	(31487)
<b><u>Monthly Allowance:</u></b>	Greater of (1) 50% of final compensation, and (2) the service retirement allowance, if eligible to retire.	(31727.4)
<b><u>Normal Form Of Payment:</u></b>	Life Annuity with 100% continuance to a surviving spouse (or eligible children).	(31760, 31786)

## **NONSERVICE-CONNECTED DISABILITY RETIREMENT ALLOWANCE**

### **Eligibility:**

<b>Plans A-D:</b>	Any age with 5 years of service, and permanently incapacitated for the performance of duty.	(31720, 31836)
<b>Plan E:</b>	Not available under Plan E.	(31487)

### **Monthly Allowance:**

The monthly allowance is equal to a service retirement allowance if the member is eligible to retire, otherwise allowance equals (a) or (b) where:

<b>General Members:</b>	(a) 90% of 1/60 of Final Compensation x years of service, if member must rely on service in another retirement system in order to be eligible to retire, or allowance exceeds 1/3 of final compensation. (b) 90% 1/60 of Final Compensation x years of service projected to age 65, not to exceed 1/3 of Final Compensation.	(31727(a)) (31727(b))
<b>Safety Members:</b>	1/60 is replaced by 1/50 and age 65 is replaced by age 55 in (a) and (b) above.	(31727.2)

<b><u>Normal Form Of Payment:</u></b>	Life Annuity with 65% continuance to a surviving spouse (or eligible children)	(31760, 31760.1, 31760.12, 31785, 31785.4)
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## **SERVICE-CONNECTED DEATH BENEFITS**

### **Eligibility:**

<b>Plans A-D:</b>	Active members who die in service as a result of injury or disease arising out of and in the course of employment.	(31787)
<b>Plan E:</b>	Not available under Plan E.	(31487)

### **Monthly Allowance:**

An annual death allowance is payable monthly to an eligible survivor (or eligible children) equal to 50% of the member's Final Compensation.

SERVICE-CONNECTED DEATH BENEFITS (Continued)

Optional Combined Benefit: (31781.3)

In lieu of the monthly allowance above, a surviving spouse may elect:

- (a) A lump sum equal to 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation), plus
- (b) A monthly payment equal to 50% of the member's Final Compensation, reduced by a monthly amount, which is the actuarial equivalent of (a) above based on the age of surviving spouse.

Death Benefit (Lump Sum): (31781)

The member's normal contributions and interest, plus 1/12 of the compensation earned in the preceding 12 months x years of service (benefit not to exceed 50% of the 12 months' compensation).

Additional Allowance for Children: (31787.5)

25% of death allowance (whether or not the monthly allowance or combined benefit is chosen) for one child, 40% for two children, and 50% for three or more children

Additional Amount for Spouse of Safety Member: (31787.6)

A surviving spouse of a safety member is also entitled to receive a lump-sum death benefit equal to 12 x monthly rate of compensation at the time of member's death in addition to all other benefits.

**Note:** For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the monthly allowance or the lump sum, whichever is more valuable.

NONSERVICE-CONNECTED DEATH BENEFITS

Eligibility: (31780)

- Plans A-D: Active members who die while in service or while physically or mentally incapacitated for the performance of duty.
- Plan E: Not available under Plan E.

**NONSERVICE-CONNECTED DEATH BENEFITS (Continued)**

**Death Benefit (Lump Sum):** (31498)

The member's normal contributions and interest, plus 1/12 of the Compensation earned in preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation).

**Optional Death Benefit:** (31781)

In lieu of the lump-sum death benefit, the following several optional death benefits are available to provide flexibility to survivors:

**First Optional Death Benefit:**

If a member who would have been entitled to a non-service-connected disability retirement allowance dies prior to retirement as a result of such disability, the surviving spouse (or eligible children) may elect to receive an optional death allowance equal to 65% of the monthly retirement allowance to which the member would have been entitled as of the date of death. (31781.1, 31781.12)

**Second Optional Death Benefit:**

if a member dies prior to reaching the minimum retirement age but has 10 or more years of County service, a surviving spouse (or eligible children) may elect to leave the amount of the death benefit on deposit until the earliest date the member could have retired and at that time receive the allowance provided for in Section 31765 (an Option 3 benefit) or 31765.2 (a 65% continuance). (31781.2, 31765.2)

**Third Optional Death Benefit:**

A surviving spouse of a member who dies after five years of County service may elect a combined benefit equal to:

- (a) A lump sum equal to 1/12 of the compensation earnable in the preceding 12 months x the number of completed years of service (benefit not to exceed 50% of the 12 months' compensation), plus (31781.3)
- (b) A monthly payment equal to 65% of the monthly retirement allowance to which the member have been entitled if the member retired or been retired for a non-service-connected disability as of the date of death, reduced by a monthly amount which is the actuarial equivalent of (a) above based on the age of surviving spouse. (31781.1, 31781.12)

## NONSERVICE-CONNECTED DEATH BENEFITS (Continued)

### Fourth Optional Death Benefit:

If a member dies while eligible for a service retirement and the surviving spouse is designated as beneficiary, the spouse (or eligible children) may elect to receive 65% of the monthly retirement allowance to which the member would have been entitled as of the date of death. (31765.1, 31765.2)

### Fifth Optional Death Benefit:

If a member dies while eligible for a service retirement and the surviving spouse is designated as beneficiary and survives the member by not less than 30 days the spouse (or eligible children) may elect to receive the same retirement allowance as the spouse would have received had the member retired on the date of death and selected Option 3. (31765)

**Note:** For valuation purposes, an unmarried member is assumed to take the lump sum benefit. A married member is assumed to take the first optional death benefit or the lump sum, whichever is more valuable.

## POST-RETIREMENT DEATH BENEFIT

**Plans A-D:** A one-time lump-sum benefit of \$5,000 is payable to the estate or to the beneficiary designated by the member upon the death of any member while receiving a retirement allowance. This is in addition to any other death or survivor benefits. The amount may be paid from surplus earnings of the retirement system, if any, but is currently paid by the County based on agreement with LACERA. It is not included for valuation purposes. (31789.1)

**Plan E:** The only death benefits payable after retirement are the continuance allowances described above under Unmodified and Optional Retirement Allowances. There is no \$5,000 lump-sum payment under Plan E. (31492)

**DEFERRED VESTED BENEFITS**

<b><u>Eligibility:</u></b>		(31700)
<b>Plans A-D:</b>	5 years of county or reciprocal service. member contributions must be left on deposit.	
<b>Plan E:</b>	Age 55 with 10 years of service.	(31491)
<b><u>Monthly Allowance:</u></b>		(31703, 31704, 31705)
<b>Plans A-D:</b>	Same as service retirement allowance; payable anytime after the member would have been eligible for service retirement.	
	If a terminated member dies before the effective date of the deferred retirement allowance, the member's accumulated contributions are paid to the estate or to the named beneficiary.	(31702)
<b>Plan E:</b>	Same as service retirement allowance at normal retirement age 65 or in an actuarially equivalent reduced amount at early retirement, after age 55.	(31491)



## **TRANSFERS BETWEEN PLAN D AND PLAN E**

Members in Plan D may transfer to Plan E on a prospective basis. Members in Plan E may transfer to Plan D on a prospective basis. (31494.2, 31494.5)

## **RECIPROCITY:**

### **Plans A-E:**

Reciprocal benefits are may be granted to members who are entitled to retirement benefits from two or more retirement systems established under the CERL or from a County retirement system and the California Public Employees' Retirement System (CalPERS). Reciprocity also applies to the members of the State Teachers' Retirement System Defined Benefit Plan. (31830, 31840.4, 31840.8)

Final Compensation may be based on service with CalPERS or another County retirement system, if greater.

(31835)

Deferred members are eligible for disability and death benefits from LACERA, if disabled while a member of CalPERS or another County retirement system, but combined benefits are limited.

## **TRANSFER FROM CALPERS**

Whenever firefighting or law enforcement functions performed by a city of the state subject to the California Public Employees Retirement Law are transferred to the County, fire authority, or district, employees performing those functions become members of LACERA. LACERA and CalPERS may enter into an agreement whereby the members' service credit plus the members' and the cities' or states' retirement contributions are transferred from CalPERS to LACERA. (31657)

## COST OF LIVING INCREASES

Cost-of-living increases (or decreases) are applied to all retirement allowances (service and disability), optional death allowances, and annual death allowances effective April 1, based on changes in the Consumer Price Index (CPI) from the previous January 1 to the current January 1, to the nearest ½ of 1%. (31870, 31870.1)

**Plan A:** Members (and their beneficiaries) are limited to a maximum 3% cost-of-living increase.

**Plans B-D:** Members (and their beneficiaries) are limited to a maximum 2% cost-of-living increase. (31870, 31870.1)

When the CPI exceeds 2 or 3%, the difference between the actual CPI and the maximum cost-of-living increase given in any year is credited to the COLA Accumulation. It may be used in future years to provide cost-of-living increases when the CPI falls below 2 or 3%, depending on the retirement plan.

**Plan E:** Members (and their beneficiaries) are limited to a maximum 2% cost of living increase. The 2% is pro-rated based on service earned after June 4, 2002. "Elective COLA" increases for service earned prior to June 4, 2002 may be purchased by the member. (31495.5)

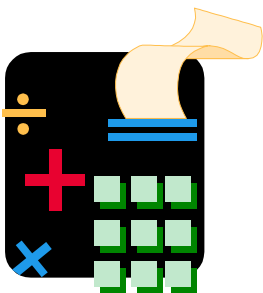
## STAR PROGRAM

Members who have a COLA Accumulation of more than 20% resulting from CPI increases that exceeded the maximum cost-of-living increases that could be granted are eligible for a supplemental cost-of-living increase effective January 1 known as the Supplemental Targeted Adjustment for Retirees Cost-of-Living Adjustment (STAR COLA). These benefits are not evaluated in this report, or as part of the actuarially required funding amount, unless they have been vested by the Board of Investments. (318874.3(b))

# Los Angeles County Employees Retirement Association

## Appendix C: Valuation Data and Schedules

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Data on LACERA membership as of June 30, 2004 was supplied to us by the system staff. On the following table, Exhibit C-1, we present a summary of LACERA membership at June 30, 2004 for active members. Similar information is shown in Exhibit C-2Ret for retired members and C-2Def for deferred vested members.

The number of total active members decreased by 1.7% and the total salary increased by 0.2% since the last valuation. The total number of retired members and their beneficiaries increased by 2.3%, while the average retirement benefit amount increased by 5.1%.

Note that salary amounts shown are the prior year annual pensionable earnings for those members of plans with a one-year final compensation period. For plans with a three-year final compensation period (Plan E only), the monthly rate of pay at June 2004 is shown.

Additional statistical data on both active and retired members is shown in the following tables. Additional detailed summaries are supplied to the system staff in a supplementary report.

Exhibit C-3: Age Distribution of Active Members

Exhibit C-4: Age, Service, Compensation Distribution of Active Members

Exhibit C-5: Age, Retirement Year, Benefit Amount and Plan Distribution of Retired Members

Exhibits C-4 and C-5 are shown for all plans combined as well as for each plan separately.

# Los Angeles County Employees Retirement Association

## Exhibit C-1: LACERA Membership – Active Members as of June 30, 2004

	Sex	Vested	NonVested	Total Number	Annual Salary	Average Age	Average Monthly Salary	Average Credited Service
<b>General Members</b>								
Plan A	M	1,742	3	1,745	\$ 137,319,912	57.7	\$ 6,558	31.3
	F	2,798	8	2,806	173,964,444	56.5	5,166	31.0
Plan B	M	139	1	140	11,033,628	55.7	6,568	26.5
	F	285	-	285	17,620,944	54.8	5,152	26.1
Plan C	M	103	-	103	7,604,364	55.2	6,152	25.7
	F	218	-	218	12,460,668	54.9	4,763	25.3
Plan D	M	8,551	4,676	13,227	749,252,664	44.0	4,720	9.3
	F	16,917	9,241	26,158	1,309,409,508	42.9	4,171	9.4
Plan E	M	5,927	2,062	7,989	484,002,840	49.0	5,049	16.7
	F	13,555	8,600	22,155	1,064,668,920	45.9	4,005	14.3
Total		50,235	24,591	74,826	\$ 3,967,337,892	45.6	\$ 4,418	13.1
<b>Safety Members</b>								
Plan A	M	813	-	813	\$ 80,564,880	54.2	\$ 8,258	32.1
	F	85	-	85	7,989,552	53.2	7,833	30.1
Plan B	M	7,510	1,786	9,296	709,527,144	39.7	6,361	13.5
	F	887	328	1,215	87,344,868	37.5	5,991	10.9
Total		9,295	2,114	11,409	\$ 885,426,444	40.6	\$ 6,467	14.7
<b>Grand Total</b>		59,530	26,705	86,235	\$ 4,852,764,336	44.9	\$ 4,689	13.3

# Los Angeles County Employees Retirement Association

## Exhibit C-2Ret: LACERA Membership – Retired Members as of June 30, 2004

	Sex	Number	Annual Allowance	Average Age	Average Monthly Benefit
<b>General Members</b>					
Plan A	M	12,691	\$ 491,199,911	72.4	\$ 3,225
	F	18,160	439,559,814	74.2	2,017
Plan B	M	127	3,355,817	68.6	2,202
	F	315	6,230,025	68.7	1,648
Plan C	M	101	2,092,794	67.9	1,727
	F	213	3,260,401	68.8	1,276
Plan D	M	1,279	26,111,686	63.9	1,701
	F	2,157	34,582,534	64.0	1,336
Plan E	M	1,479	21,829,485	68.6	1,230
	F	2,575	27,593,803	67.9	893
Total		39,097	\$ 1,055,816,270	72.0	\$ 2,250
<b>Safety Members</b>					
Plan A	M	6,286	\$ 376,421,994	66.3	\$ 4,990
	F	1,731	62,894,467	69.2	3,028
Plan B	M	907	30,099,915	46.7	2,766
	F	311	9,085,759	44.3	2,435
Total		9,235	\$ 478,502,135	64.2	\$ 4,318
<b>Grand Total</b>		48,332	\$ 1,534,318,405	70.5	\$ 2,645

# Los Angeles County Employees Retirement Association

## Exhibit C-2Def: LACERA Membership – Deferred Vested Members as of June 30, 2004 Subtotaled by Plan and Retirement Type

	Sex	Number	Average Age	Average Monthly Benefit
<b>General Members</b>				
Plan A	M	200	58.6	\$ -
	F	321	55.8	-
Plan B	M	19	55.7	-
	F	44	52.8	-
Plan C	M	9	56.1	-
	F	23	52.2	-
Plan D	M	621	45.9	-
	F	1,138	44.3	-
Plan E	M	1,218	51.2	-
	F	2,667	50.2	-
Total		6,260	49.5	\$ -
<b>Safety Members</b>				
Plan A	M	20	55.7	\$ -
	F	-		-
Plan B	M	227	39.2	-
	F	67	39.6	-
Total		314	40.3	\$ -
<b>Grand Total</b>		6,574	49.1	\$ -

# Los Angeles County Employees Retirement Association

## Exhibit C-2a: LACERA Membership – Retired Members as of June 30, 2004 Subtotaled by Plan and Retirement Type

<u>Plan</u>	<u>Retirement Type</u>	<u>Number</u>	<u>Annual Benefits in Thousands</u>	<u>Average Monthly Benefit</u>
<b>General Plans:</b>				
<b>Plan A</b>				
	Healthy	22,777	\$ 771,002	\$ 2,821
	Disabled	2,978	69,269	1,938
	Beneficiaries	5,096	90,489	1,480
	Total	30,851	\$ 930,760	\$ 2,514
<b>Plan B</b>				
	Healthy	350	\$ 8,078	\$ 1,923
	Disabled	68	1,208	1,480
	Beneficiaries	24	300	1,042
	Total	442	\$ 9,586	\$ 1,807
<b>Plan C</b>				
	Healthy	230	\$ 4,046	\$ 1,466
	Disabled	58	1,059	1,522
	Beneficiaries	26	248	795
	Total	314	\$ 5,353	\$ 1,421
<b>Plan D</b>				
	Healthy	2,243	\$ 38,913	\$ 1,446
	Disabled	900	18,806	1,741
	Beneficiaries	293	2,975	846
	Total	3,436	\$ 60,694	\$ 1,472
<b>Plan E</b>				
	Healthy	3,828	\$ 47,946	\$ 1,044
	Disabled	0	0	N/A
	Beneficiaries	226	1,477	545
	Total	4,054	\$ 49,423	\$ 1,016
<b>Safety Plans:</b>				
<b>Plan A</b>				
	Healthy	2,938	\$ 183,268	\$ 5,198
	Disabled	3,842	215,417	4,672
	Beneficiaries	1,237	40,632	2,737
	Total	8,017	\$ 439,317	\$ 4,567
<b>Plan B</b>				
	Healthy	122	\$ 4,138	\$ 2,827
	Disabled	1,028	33,487	2,715
	Beneficiaries	68	1,560	1,912
	Total	1,218	\$ 39,185	\$ 2,681
<b>Grand Totals</b>		48,332	1,534,318	2,645

**Los Angeles County Employees  
Retirement Association**

**Exhibit C-2b: LACERA Membership – Retired Members as of June 30, 2004  
Subtotaled by Retirement Type and Plan**

<u>Type</u>	<u>Plan</u>	<u>Number</u>	<u>Annual Benefits in Thousands</u>	<u>Average Monthly Benefit</u>
<b>Healthy Retirees</b>				
	General A	22,777	\$ 771,002	\$ 2,821
	General B	350	8,078	1,923
	General C	230	4,046	1,466
	General D	2,243	38,913	1,446
	General E	3,828	47,946	1,044
	Safety A	2,938	183,268	5,198
	Safety B	122	4,138	2,827
	Total	32,488	\$ 1,057,391	\$ 2,712
<b>Disabled Retirees</b>				
	General A	2,978	\$ 69,269	\$ 1,938
	General B	68	1,208	1,480
	General C	58	1,059	1,522
	General D	900	18,806	1,741
	Safety A	3,842	215,417	4,672
	Safety B	1,028	33,487	2,715
	Total	8,874	\$ 339,246	\$ 3,186
<b>Beneficiaries</b>				
	General A	5,096	\$ 90,489	\$ 1,480
	General B	24	300	1,042
	General C	26	248	795
	General D	293	2,975	846
	General E	226	1,477	545
	Safety A	1,237	40,632	2,737
	Safety B	68	1,560	1,912
	Total	6,970	\$ 137,681	\$ 1,646
<b>Grand Totals</b>		48,332	\$ 1,534,318	\$ 2,645



## Los Angeles County Employees Retirement Association

### Exhibit C-3: Age Distribution of Active Members as of June 30, 2004

		Age Groups						
		0-29	30-39	40-49	50-59	60-69	70+	Total
General Plans:								
Plan A								
Male	-	-	28	1,221	460	36	1,745	
Female	-	-	130	2,030	592	54	2,806	
Plan B								
Male	-	-	12	101	27	-	140	
Female	-	-	63	161	51	10	285	
Plan C								
Male	-	-	14	71	13	5	103	
Female	-	-	54	113	45	6	218	
Plan D								
Male	1,166	3,798	4,105	3,021	1,019	118	13,227	
Female	2,626	8,135	8,230	5,477	1,554	136	26,158	
Plan E								
Male	295	1,221	2,417	2,832	1,093	131	7,989	
Female	1,488	4,953	7,063	6,491	1,982	178	22,155	
Safety Plans:								
Plan A								
Male	-	-	26	771	16	-	813	
Female	-	-	10	75	-	-	85	
Plan B								
Male	833	3,760	3,820	863	20	-	9,296	
Female	184	572	393	66	-	-	1,215	
Grand Totals:	6,592	22,439	26,365	23,293	6,872	674	86,235	

## Los Angeles County Employees Retirement Association

**Exhibit C-4: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2004  
All Plans**

Count													
Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	278	204	279	144	60	18	0	0	0	0	0	0	983
25-29	688	682	1,087	1,148	1,020	979	5	0	0	0	0	0	5,609
30-34	497	557	992	1,344	1,529	3,856	917	27	0	0	0	0	9,719
35-39	390	380	746	1,033	1,058	3,573	3,887	1,602	38	11	2	0	12,720
40-44	261	272	581	830	782	2,430	3,273	3,588	1,120	73	12	14	13,236
45-49	261	222	443	634	623	1,917	2,464	2,815	2,488	1,147	64	51	13,129
50-54	153	147	323	483	451	1,501	1,884	2,089	1,834	2,318	1,589	154	12,926
55-59	91	100	217	289	298	1,085	1,323	1,408	1,134	1,592	2,042	788	10,367
60-64	33	39	91	122	121	560	803	794	614	688	654	593	5,112
65 & Over	5	20	37	50	46	301	453	463	344	287	249	179	2,434
Total Count	2,657	2,623	4,796	6,077	5,988	16,220	15,009	12,786	7,572	6,116	4,612	1,779	86,235

Average Compensation													
Age	Years of Service												Average Comp.
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	32,202	32,514	33,201	33,445	40,178	33,561	-	-	-	-	-	-	33,244
25-29	38,466	39,754	40,016	41,594	43,463	45,214	36,487	-	-	-	-	-	41,648
30-34	42,203	44,986	44,909	45,607	47,507	53,496	54,263	61,214	-	-	-	-	49,615
35-39	44,302	45,008	45,856	46,941	48,563	55,467	59,746	58,901	77,162	81,001	101,022	-	54,816
40-44	46,898	46,090	43,984	45,475	47,234	54,027	60,281	65,383	66,268	67,030	80,974	88,630	58,138
45-49	47,165	47,859	46,466	44,370	47,367	51,993	58,421	65,664	69,359	61,107	60,960	90,438	59,471
50-54	53,834	47,743	45,771	47,681	48,299	51,478	56,278	62,005	67,119	67,718	62,404	72,278	60,191
55-59	58,310	50,839	51,530	46,527	48,538	52,871	54,381	60,363	63,252	66,766	69,936	66,965	61,482
60-64	52,426	53,090	53,106	46,823	53,912	52,306	53,469	59,379	63,318	60,752	63,252	70,027	59,431
65 & Over	102,826	53,624	52,411	64,852	49,030	52,923	51,653	55,104	58,268	59,297	62,730	61,036	56,480
Avg. Annual Compensation	42,908	43,581	43,869	45,032	47,133	53,030	57,814	62,774	66,490	65,067	65,922	68,693	56,274

## Los Angeles County Employees Retirement Association

**Exhibit C-4a: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2004  
General Plan A**

<b>Count</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Total Count</b>
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	1	2	2	12	110	31	0	158
50-54	1	0	1	0	1	5	14	15	34	437	721	54	1,283
55-59	0	1	0	0	1	11	18	39	46	440	1,028	384	1,968
60-64	0	0	0	2	2	10	8	28	27	190	324	239	830
65 & Over	0	1	0	0	1	3	5	8	13	60	130	91	312
<b>Total Count</b>	1	2	1	2	5	30	47	92	132	1,237	2,234	768	4,551

<b>Compensation</b>													
<b>Age</b>	<b>Years of Service</b>												<b>Average Comp.</b>
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	74,688	34,920	52,944	54,036	56,791	59,398	-	56,881
50-54	24,012	-	28,656	-	90,084	71,731	57,020	63,082	65,235	62,812	62,081	69,003	62,665
55-59	-	122,256	-	-	32,028	66,076	83,568	80,689	67,003	68,429	72,603	67,097	70,693
60-64	-	-	-	110,208	38,388	58,182	75,429	85,671	88,671	67,144	69,642	76,658	72,190
65 & Over	-	39,000	-	-	64,596	75,728	69,900	89,421	83,813	70,553	72,883	73,211	73,254
<b>Avg. Annual Compensation</b>	24,012	80,628	28,656	110,208	52,697	65,640	70,750	79,491	71,456	65,316	68,611	70,931	68,399



This work product was prepared solely for LACERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

C-9

## Los Angeles County Employees Retirement Association

**Exhibit C-4b: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2004**  
**General Plan B**

### Count

Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	2	0	0	2
45-49	0	0	0	0	0	0	1	2	1	69	0	0	73
50-54	0	0	0	1	0	0	2	4	4	132	2	0	145
55-59	0	0	0	0	0	1	1	0	2	110	3	0	117
60-64	0	0	0	0	0	0	0	2	1	49	2	0	54
65 & Over	0	0	0	0	0	0	0	0	1	33	0	0	34
<b>Total Count</b>	0	0	0	1	0	1	4	8	9	395	7	0	425

### Compensation

Age	Years of Service												Average Comp.
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	50,418	-	-	50,418
45-49	-	-	-	-	-	-	76,212	59,406	52,020	58,203	-	-	58,398
50-54	-	-	-	128,112	-	-	89,268	69,678	81,900	70,748	86,652	-	71,897
55-59	-	-	-	-	-	83,772	39,372	-	108,348	69,140	86,164	-	70,117
60-64	-	-	-	-	-	-	-	101,088	75,540	64,546	49,926	-	65,562
65 & Over	-	-	-	-	-	-	-	-	51,480	62,731	-	-	62,400
<b>Avg. Annual Compensation</b>	-	-	-	128,112	-	83,772	73,530	74,962	80,371	66,567	75,950	-	67,423



This work product was prepared solely for LACERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

## Los Angeles County Employees Retirement Association

**Exhibit C-4c: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2004**  
**General Plan C**

**Count**

Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	1	5	0	0	6
45-49	0	0	0	0	0	0	0	1	5	56	0	0	62
50-54	0	0	0	0	0	0	0	1	6	93	0	0	100
55-59	0	0	0	0	0	0	0	3	7	74	0	0	84
60-64	0	0	0	0	0	0	0	0	0	39	1	0	40
65 & Over	0	0	0	0	0	0	0	2	3	23	1	0	29
Total Count	0	0	0	0	0	0	0	7	22	290	2	0	321

**Compensation**

Age	Years of Service												Average
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	Comp.
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	35,508	51,072	-	-	48,478
45-49	-	-	-	-	-	-	-	41,160	52,490	55,023	-	-	54,595
50-54	-	-	-	-	-	-	-	92,412	82,800	71,648	-	-	72,525
55-59	-	-	-	-	-	-	-	80,044	49,329	61,402	-	-	61,061
60-64	-	-	-	-	-	-	-	-	-	58,144	212,940	-	62,014
65 & Over	-	-	-	-	-	-	-	66,102	33,552	54,794	33,972	-	52,658
Avg. Annual Compensation	-	-	-	-	-	-	-	72,273	56,396	62,316	123,456	-	62,508



This work product was prepared solely for LACERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

## Los Angeles County Employees Retirement Association

### Exhibit C-4d: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2004 General Plan D

Count													
Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	153	143	151	84	30	9	0	0	0	0	0	0	570
25-29	406	474	677	637	515	511	2	0	0	0	0	0	3,222
30-34	321	390	608	797	881	2,081	384	8	0	0	0	0	5,470
35-39	248	275	515	622	653	2,061	1,563	522	4	0	0	0	6,463
40-44	174	208	406	516	510	1,494	1,557	1,224	247	10	0	0	6,346
45-49	175	159	311	416	409	1,229	1,347	1,171	624	145	3	0	5,989
50-54	96	104	220	321	282	963	1,081	966	582	213	95	10	4,933
55-59	61	73	156	197	204	712	822	662	449	126	80	23	3,565
60-64	18	26	58	65	80	341	478	409	269	64	18	16	1,842
65 & Over	5	14	21	29	23	171	278	254	155	31	3	1	985
Total Count	1,657	1,866	3,123	3,684	3,587	9,572	7,512	5,216	2,330	589	199	50	39,385

Compensation													
Age	Years of Service												Average Comp.
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	31,654	32,385	29,346	31,888	36,998	31,751	-	-	-	-	-	-	31,543
25-29	39,259	39,080	38,172	39,516	40,681	41,873	35,982	-	-	-	-	-	39,695
30-34	43,421	44,056	43,123	44,110	46,204	50,140	48,279	48,985	-	-	-	-	46,887
35-39	46,656	44,289	45,633	46,635	47,972	53,379	54,862	51,435	62,454	-	-	-	51,129
40-44	44,279	45,567	44,195	46,613	46,815	53,348	57,420	60,738	54,899	61,021	-	-	53,683
45-49	44,048	47,524	48,002	45,442	49,566	53,594	58,177	63,506	60,976	60,755	57,084	-	55,935
50-54	46,698	44,061	44,946	49,662	49,382	53,031	57,655	63,480	66,675	65,622	59,081	67,187	57,289
55-59	51,741	49,313	51,269	46,587	49,812	53,997	55,977	62,685	66,478	71,725	69,594	82,273	57,895
60-64	40,008	56,699	56,229	48,906	54,015	53,180	54,257	60,340	63,393	66,612	81,367	80,551	57,423
65 & Over	102,826	52,522	48,985	65,464	49,840	54,999	52,808	55,034	60,307	72,014	131,148	63,972	56,268
Avg. Annual Compensation	42,594	42,842	43,241	44,833	46,779	52,096	56,054	60,856	63,053	66,095	66,379	78,338	52,270



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## Los Angeles County Employees Retirement Association

### Exhibit C-4e: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2004 General Plan E

Count

Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	109	40	74	47	17	7	0	0	0	0	0	0	294
25-29	240	146	239	309	296	256	3	0	0	0	0	0	1,489
30-34	140	115	230	322	414	910	303	6	0	0	0	0	2,440
35-39	116	77	156	267	286	905	1,309	613	5	0	0	0	3,734
40-44	77	55	143	258	225	707	1,203	1,414	437	23	0	0	4,542
45-49	83	61	121	203	206	606	929	1,210	926	575	18	0	4,938
50-54	55	42	100	154	165	503	766	992	849	967	605	40	5,238
55-59	30	26	60	85	91	346	477	682	565	677	736	310	4,085
60-64	15	13	32	55	39	198	315	353	315	345	302	330	2,312
65 & Over	0	5	16	21	22	126	170	199	172	139	115	87	1,072
Total Count	865	580	1,171	1,721	1,761	4,564	5,475	5,469	3,269	2,726	1,776	767	30,144

Compensation

Age	Years of Service												Average Comp.
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	32,251	29,656	29,247	31,057	36,156	30,240	-	-	-	-	-	-	31,129
25-29	36,147	37,944	36,519	35,993	37,638	38,340	36,824	-	-	-	-	-	37,026
30-34	37,370	45,231	42,415	38,877	42,168	46,990	45,156	44,322	-	-	-	-	43,801
35-39	37,959	43,906	40,166	39,028	43,846	49,427	51,556	47,887	52,301	-	-	-	47,896
40-44	51,530	46,619	40,005	39,490	44,422	49,310	56,171	57,045	50,847	47,776	-	-	52,587
45-49	53,694	48,226	40,676	40,457	42,393	45,982	54,755	60,741	56,321	51,780	45,662	-	53,512
50-54	66,480	56,352	47,480	42,227	45,731	46,969	53,555	58,081	58,247	56,388	53,412	54,368	54,516
55-59	71,668	52,379	51,548	43,141	45,153	48,634	50,422	56,034	57,994	58,532	57,715	57,176	55,342
60-64	67,327	45,871	47,053	42,057	54,496	48,346	51,549	55,841	60,912	55,783	54,181	62,846	55,626
65 & Over	-	59,633	56,908	64,007	47,475	48,926	49,227	53,703	54,970	51,467	49,718	48,268	51,626
Avg. Annual Compensation	42,851	43,857	40,831	39,366	42,763	47,423	52,859	56,685	56,744	55,548	55,009	58,459	51,376



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## Los Angeles County Employees Retirement Association

### Exhibit C-4f: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2004 Safety Plan A

#### Count

Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	0	0	0	0	0	0	0	0	0	0	0	0	0
25-29	0	0	0	0	0	0	0	0	0	0	0	0	0
30-34	0	0	0	0	0	0	0	0	0	0	0	0	0
35-39	0	0	0	0	0	0	0	0	0	0	0	0	0
40-44	0	0	0	0	0	0	0	0	0	0	0	0	0
45-49	0	0	0	0	0	0	0	0	1	27	1	7	36
50-54	0	0	0	0	0	0	1	2	6	273	159	31	472
55-59	0	0	0	0	0	0	1	1	1	111	194	66	374
60-64	0	0	0	0	0	1	0	0	0	1	6	8	16
65 & Over	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Total Count</b>	0	0	0	0	0	1	2	3	8	412	360	112	898

#### Compensation

Age	Years of Service												Average Comp.
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	-	-	-	-	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-	-	-	-	-
40-44	-	-	-	-	-	-	-	-	-	-	-	-	-
45-49	-	-	-	-	-	-	-	-	78,972	96,703	112,476	88,308	95,016
50-54	-	-	-	-	-	-	74,928	77,310	89,074	95,931	98,605	95,570	96,598
55-59	-	-	-	-	-	-	100,320	95,112	79,680	95,689	101,969	104,869	100,534
60-64	-	-	-	-	-	69,600	-	-	-	101,148	98,744	147,100	121,251
65 & Over	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Avg. Annual Compensation</b>	-	-	-	-	-	69,600	87,624	83,244	86,637	95,929	100,458	104,277	98,613



This work product was prepared solely for LACERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.



## Los Angeles County Employees Retirement Association

### Exhibit C-4g: Age & Service Distribution of Active Members by Count and Average Compensation as of June 30, 2004 Safety Plan B

Count													
Age	Years of Service												Total Count
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	16	21	54	13	13	2	0	0	0	0	0	0	119
25-29	42	62	171	202	209	212	0	0	0	0	0	0	898
30-34	36	52	154	225	234	865	230	13	0	0	0	0	1,809
35-39	26	28	75	144	119	607	1,015	467	29	11	2	0	2,523
40-44	10	9	32	56	47	229	513	950	435	33	12	14	2,340
45-49	3	2	11	15	8	81	185	429	919	165	11	44	1,873
50-54	1	1	2	7	3	30	20	109	353	203	7	19	755
55-59	0	0	1	7	2	15	4	21	64	54	1	5	174
60-64	0	0	1	0	0	10	2	2	2	0	1	0	18
65 & Over	0	0	0	0	0	1	0	0	0	1	0	0	2
Total Count	134	175	501	669	635	2,052	1,969	1,991	1,802	467	34	82	10,511

Compensation													
Age	Years of Service												Average Comp.
	0-1	1-2	2-3	3-4	4-5	5-9	10-14	15-19	20-24	25-29	30-34	35&Over	
Under 25	37,123	38,838	49,401	52,138	52,778	53,334	-	-	-	-	-	-	46,620
25-29	44,055	49,172	52,205	56,717	58,568	61,566	-	-	-	-	-	-	56,320
30-34	50,136	51,413	55,685	60,538	61,859	68,416	76,251	76,536	-	-	-	-	65,706
35-39	50,140	55,105	59,221	62,934	63,149	71,565	77,830	81,704	83,477	81,001	101,022	-	74,503
40-44	56,796	54,927	59,094	62,555	65,248	73,020	78,601	83,779	88,286	85,696	80,974	88,630	81,026
45-49	48,364	63,294	66,730	67,603	63,088	72,396	78,764	85,586	88,488	94,251	86,771	90,777	86,224
50-54	73,104	69,192	59,610	65,321	73,872	73,843	81,387	83,638	88,564	92,742	88,728	83,965	87,690
55-59	-	-	91,068	85,929	80,940	85,396	59,274	85,585	84,188	87,922	86,220	93,089	85,387
60-64	-	-	65,676	-	-	93,337	79,638	77,508	83,736	-	70,428	-	86,180
65 & Over	-	-	-	-	-	133,164	-	-	-	68,232	-	-	100,698
Avg. Annual Compensation	47,306	50,119	54,916	60,380	61,215	69,652	77,934	83,639	88,215	91,891	85,469	88,973	75,813



This work product was prepared solely for LACERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

## Los Angeles County Employees Retirement Association

**Exhibit C-5: Distribution of Retired Members by Age and Retirement Year as of June 30, 2004  
All Plans**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1960	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04		
Under 35	0	0	0	0	0	2	0	12	31	86	131	\$ 1,478
35-39	0	0	0	0	1	0	1	25	87	101	215	2,512
40-44	0	0	0	0	0	0	11	82	162	141	396	2,390
45-49	0	0	0	0	1	21	59	124	148	150	503	2,305
50-54	0	0	0	0	29	86	113	153	212	605	1,198	2,184
55-59	0	0	1	16	153	240	207	282	993	2,759	4,651	3,287
60-64	0	1	4	48	201	262	291	1,042	2,456	3,183	7,488	3,478
65-69	0	2	31	72	215	297	857	2,107	2,348	2,188	8,117	2,956
70-74	3	17	61	133	268	991	1,554	2,395	1,691	944	8,057	2,624
75-79	3	33	76	146	885	1,549	1,566	1,608	784	519	7,169	2,312
80-84	7	37	68	348	1,231	1,478	1,145	631	423	385	5,753	2,057
85-89	9	18	90	417	944	720	206	165	212	206	2,987	1,729
90-94	8	24	151	310	481	89	9	54	70	54	1,250	1,500
95-99	13	26	78	181	3	2	0	12	20	13	348	1,215
100 & Over	16	15	23	9	0	1	1	3	0	1	69	961
<b>Total Count</b>	59	173	583	1,680	4,412	5,738	6,020	8,695	9,637	11,335	<b>48,332</b>	
<b>Avg Monthly Benefit</b>	\$ 940	\$ 1,110	\$ 1,297	\$ 1,528	\$ 1,915	\$ 2,050	\$ 2,428	\$ 2,889	\$ 2,764	\$ 3,326		<b>\$ 2,645</b>

## Los Angeles County Employees Retirement Association

### Exhibit C-5a: Distribution of Retired Members by Age and Retirement Year as of June 30, 2004 General Plan A

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1960	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04		
Under 35	0	0	0	0	0	0	0	5	11	17	33	\$ 1,011
35-39	0	0	0	0	1	0	1	1	1	3	7	1,036
40-44	0	0	0	0	0	0	0	0	4	3	7	1,431
45-49	0	0	0	0	0	4	8	3	11	12	38	1,661
50-54	0	0	0	0	17	33	24	30	38	234	376	1,831
55-59	0	0	1	9	71	85	67	98	553	1,044	1,928	2,859
60-64	0	1	1	24	111	109	124	724	1,128	1,839	4,061	3,451
65-69	0	0	15	44	130	152	661	1,339	1,471	981	4,793	3,082
70-74	1	6	22	80	174	752	1,076	1,907	918	360	5,296	2,691
75-79	2	12	40	91	657	1,155	1,343	1,209	425	304	5,238	2,267
80-84	3	21	42	263	1,026	1,388	1,024	452	300	295	4,814	2,006
85-89	1	13	56	355	914	708	178	125	180	178	2,708	1,691
90-94	2	19	111	286	481	88	7	52	64	44	1,154	1,422
95-99	7	24	72	181	3	2	0	11	20	12	332	1,178
100 & Over	13	15	23	9	0	1	1	3	0	1	66	959
<b>Total Count</b>	29	111	383	1,342	3,585	4,477	4,514	5,959	5,124	5,327	<b>30,851</b>	
<b>Avg Monthly Benefit</b>	\$ 769	\$ 931	\$ 996	\$ 1,255	\$ 1,662	\$ 1,771	\$ 2,226	\$ 2,901	\$ 2,829	\$ 3,690		<b>\$ 2,514</b>



This work product was prepared solely for LACERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

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## Los Angeles County Employees Retirement Association

**Exhibit C-5b: Distribution of Retired Members by Age and Retirement Year as of June 30, 2004  
General Plan B**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1960	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04		
Under 35	0	0	0	0	0	0	0	0	0	0	0	\$ -
35-39	0	0	0	0	0	0	0	0	0	0	0	-
40-44	0	0	0	0	0	0	0	0	0	0	0	-
45-49	0	0	0	0	0	0	0	2	1	0	3	1,486
50-54	0	0	0	0	0	1	2	2	1	11	17	1,710
55-59	0	0	0	0	0	3	4	4	17	23	51	1,453
60-64	0	0	0	0	0	2	4	6	17	49	78	2,366
65-69	0	0	0	0	0	2	2	10	27	45	86	2,350
70-74	0	0	0	0	0	1	13	15	35	14	78	1,730
75-79	0	0	0	0	0	4	12	39	16	10	81	1,484
80-84	0	0	0	0	0	1	19	11	4	4	39	1,146
85-89	0	0	0	0	0	4	3	0	2	0	9	520
90-94	0	0	0	0	0	0	0	0	0	0	0	-
95-99	0	0	0	0	0	0	0	0	0	0	0	-
100 & Over	0	0	0	0	0	0	0	0	0	0	0	-
<b>Total Count</b>	0	0	0	0	0	18	59	89	120	156	<b>442</b>	
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 854	\$ 822	\$ 1,335	\$ 1,793	\$ 2,571		<b>\$ 1,807</b>



This work product was prepared solely for LACERA. It may not be appropriate to use for other purposes. Milliman does not intend to benefit and assumes no duty or liability to other parties who receive this work.

## Los Angeles County Employees Retirement Association

**Exhibit C-5c: Distribution of Retired Members by Age and Retirement Year as of June 30, 2004  
General Plan C**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1960	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04		
Under 35	0	0	0	0	0	0	0	0	0	0	0	\$ -
35-39	0	0	0	0	0	0	0	0	0	0	0	-
40-44	0	0	0	0	0	0	0	0	0	1	1	3,312
45-49	0	0	0	0	0	1	2	1	1	0	5	739
50-54	0	0	0	0	1	2	3	2	3	10	21	1,482
55-59	0	0	0	0	0	3	3	1	6	18	31	1,771
60-64	0	0	0	0	0	0	3	10	10	20	43	1,470
65-69	0	0	0	0	0	0	7	12	16	28	63	1,651
70-74	0	0	0	0	0	1	8	13	23	14	59	1,534
75-79	0	0	0	0	0	3	9	30	4	9	55	1,075
80-84	0	0	0	0	0	4	12	8	1	1	26	1,015
85-89	0	0	0	0	0	0	5	1	1	2	9	935
90-94	0	0	0	0	0	0	0	0	1	0	1	1,346
95-99	0	0	0	0	0	0	0	0	0	0	0	-
100 & Over	0	0	0	0	0	0	0	0	0	0	0	-
<b>Total Count</b>	0	0	0	0	1	14	52	78	66	103	<b>314</b>	
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ -	\$ -	\$ 1,219	\$ 707	\$ 739	\$ 1,034	\$ 1,532	\$ 2,085		<b>\$ 1,421</b>

## Los Angeles County Employees Retirement Association

**Exhibit C-5d: Distribution of Retired Members by Age and Retirement Year as of June 30, 2004  
General Plan D**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1960	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04		
Under 35	0	0	0	0	0	0	0	3	7	19	29	\$ 894
35-39	0	0	0	0	0	0	0	3	5	18	26	1,455
40-44	0	0	0	0	0	0	0	10	35	37	82	1,469
45-49	0	0	0	0	0	2	8	25	40	35	110	1,601
50-54	0	0	0	0	1	4	16	34	54	190	299	1,346
55-59	0	0	0	0	0	2	17	36	185	266	506	1,515
60-64	0	0	0	0	0	5	14	69	195	338	621	1,705
65-69	0	0	0	0	0	5	21	71	208	412	717	1,552
70-74	0	0	0	0	0	3	22	73	253	230	581	1,411
75-79	0	0	0	0	0	8	16	100	129	53	306	1,183
80-84	0	0	0	0	1	5	22	58	29	19	134	1,144
85-89	0	0	0	0	0	1	5	12	2	3	23	868
90-94	0	0	0	0	0	0	0	1	0	1	2	725
95-99	0	0	0	0	0	0	0	0	0	0	0	-
100 & Over	0	0	0	0	0	0	0	0	0	0	0	-
<b>Total Count</b>	0	0	0	0	2	35	141	495	1,142	1,621	<b>3,436</b>	
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ -	\$ -	\$3,830	\$1,138	\$1,084	\$1,179	\$1,399	\$1,651		<b>\$ 1,472</b>

## Los Angeles County Employees Retirement Association

**Exhibit C-5e: Distribution of Retired Members by Age and Retirement Year as of June 30, 2004  
General Plan E**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1960	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04		
Under 35	0	0	0	0	0	0	0	0	2	2	4	\$ 632
35-39	0	0	0	0	0	0	0	0	0	2	2	556
40-44	0	0	0	0	0	0	0	0	0	2	2	443
45-49	0	0	0	0	0	0	0	0	0	4	4	657
50-54	0	0	0	0	0	0	0	0	5	7	12	639
55-59	0	0	0	0	0	0	0	2	8	445	455	555
60-64	0	0	0	0	0	0	0	3	340	439	782	843
65-69	0	0	0	0	0	0	1	142	321	673	1,137	1,330
70-74	0	0	0	0	0	1	58	141	416	263	879	1,126
75-79	0	0	0	0	0	9	43	204	162	78	496	995
80-84	0	0	0	0	0	8	63	82	46	28	227	697
85-89	0	0	0	0	0	7	15	15	10	4	51	738
90-94	0	0	0	0	0	1	2	0	0	0	3	345
95-99	0	0	0	0	0	0	0	0	0	0	0	-
100 & Over	0	0	0	0	0	0	0	0	0	0	0	-
<b>Total Count</b>	0	0	0	0	0	26	182	589	1,310	1,947	<b>4,054</b>	
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 298	\$ 388	\$ 699	\$ 876	\$ 1,274		<b>\$ 1,016</b>

## Los Angeles County Employees Retirement Association

**Exhibit C-5f: Distribution of Retired Members by Age and Retirement Year as of June 30, 2004  
Safety Plan A**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1960	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04		
Under 35	0	0	0	0	0	2	0	1	5	5	13	\$ 1,162
35-39	0	0	0	0	0	0	0	1	1	3	5	4,063
40-44	0	0	0	0	0	0	0	2	0	1	3	2,465
45-49	0	0	0	0	1	4	3	2	6	7	23	3,099
50-54	0	0	0	0	10	37	41	39	73	86	286	3,372
55-59	0	0	0	7	82	138	104	120	192	911	1,554	5,301
60-64	0	0	3	24	90	145	145	223	760	476	1,866	5,331
65-69	0	2	16	28	85	138	163	529	302	48	1,311	4,781
70-74	2	11	39	53	94	232	376	242	46	61	1,156	4,188
75-79	1	21	36	55	228	369	142	26	48	65	991	3,698
80-84	4	16	26	85	204	72	5	20	43	38	513	3,496
85-89	8	5	34	62	30	0	0	12	17	19	187	2,752
90-94	6	5	40	24	0	0	0	1	5	9	90	2,556
95-99	6	2	6	0	0	0	0	1	0	1	16	1,981
100 & Over	3	0	0	0	0	0	0	0	0	0	3	1,013
<b>Total Count</b>	30	62	200	338	824	1,137	979	1,219	1,498	1,730	<b>8,017</b>	
<b>Avg Monthly Benefit</b>	\$ 1,105	\$ 1,430	\$ 1,874	\$ 2,615	\$ 3,009	\$ 3,265	\$ 4,180	\$ 4,906	\$ 5,377	\$ 6,306		<b>\$ 4,567</b>



## Los Angeles County Employees Retirement Association

**Exhibit C-5g: Distribution of Retired Members by Age and Retirement Year as of June 30, 2004  
Safety Plan B**

Age	Retirement Year										Total Count	Average Monthly Benefit
	Pre-1960	1960-64	1965-69	1970-74	1975-79	1980-84	1985-89	1990-94	1995-99	2000-04		
Under 35	0	0	0	0	0	0	0	3	6	43	52	\$2,244
35-39	0	0	0	0	0	0	0	20	80	75	175	2,707
40-44	0	0	0	0	0	0	11	70	123	97	301	2,672
45-49	0	0	0	0	0	10	38	91	89	92	320	2,619
50-54	0	0	0	0	0	9	27	46	38	67	187	2,642
55-59	0	0	0	0	0	9	12	21	32	52	126	3,107
60-64	0	0	0	0	0	1	1	7	6	22	37	3,024
65-69	0	0	0	0	0	0	2	4	3	1	10	2,466
70-74	0	0	0	0	0	1	1	4	0	2	8	1,152
75-79	0	0	0	0	0	1	1	0	0	0	2	722
80-84	0	0	0	0	0	0	0	0	0	0	0	-
85-89	0	0	0	0	0	0	0	0	0	0	0	-
90-94	0	0	0	0	0	0	0	0	0	0	0	-
95-99	0	0	0	0	0	0	0	0	0	0	0	-
100 & Over	0	0	0	0	0	0	0	0	0	0	0	-
<b>Total Count</b>	0	0	0	0	0	31	93	266	377	451	<b>1,218</b>	
<b>Avg Monthly Benefit</b>	\$ -	\$ -	\$ -	\$ -	\$ -	\$1,574	\$1,792	\$2,472	\$2,738	\$3,017		<b>\$2,681</b>

## Los Angeles County Employees Retirement Association

### Appendix D: Member Contribution Rates

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This section illustrates the member normal contribution rates and the normal plus cost-of-living contribution rates by entry age.

# Los Angeles County Employees Retirement Association

## Exhibit D-1: Normal Member Contribution Rates

Entry Age	General				Safety	
	Plan A	Plan B	Plan C	Plan D	Plan A	Plan B
16	2.28%	4.56%	3.83%	3.83%	3.34%	6.67%
17	2.33%	4.67%	3.92%	3.92%	3.34%	6.67%
18	2.39%	4.77%	4.00%	4.00%	3.34%	6.67%
19	2.44%	4.88%	4.10%	4.10%	3.41%	6.82%
20	2.49%	4.99%	4.19%	4.19%	3.49%	6.97%
21	2.55%	5.10%	4.28%	4.28%	3.56%	7.13%
22	2.61%	5.21%	4.38%	4.38%	3.64%	7.29%
23	2.66%	5.33%	4.48%	4.48%	3.72%	7.45%
24	2.72%	5.45%	4.58%	4.58%	3.81%	7.61%
25	2.78%	5.57%	4.68%	4.68%	3.89%	7.78%
26	2.85%	5.69%	4.79%	4.79%	3.98%	7.96%
27	2.91%	5.82%	4.89%	4.89%	4.07%	8.14%
28	2.97%	5.95%	5.00%	5.00%	4.16%	8.32%
29	3.04%	6.08%	5.11%	5.11%	4.25%	8.51%
30	3.11%	6.22%	5.23%	5.23%	4.35%	8.70%
31	3.18%	6.36%	5.34%	5.34%	4.45%	8.90%
32	3.25%	6.50%	5.46%	5.46%	4.55%	9.11%
33	3.32%	6.65%	5.58%	5.58%	4.66%	9.31%
34	3.40%	6.80%	5.71%	5.71%	4.76%	9.52%
35	3.48%	6.95%	5.83%	5.83%	4.86%	9.72%
36	3.56%	7.11%	5.96%	5.96%	4.96%	9.92%
37	3.64%	7.27%	6.10%	6.10%	5.06%	10.13%
38	3.72%	7.44%	6.24%	6.24%	5.16%	10.32%
39	3.80%	7.60%	6.38%	6.38%	5.26%	10.51%
40	3.88%	7.76%	6.52%	6.52%	5.35%	10.70%
41	3.96%	7.93%	6.67%	6.67%	5.44%	10.89%
42	4.04%	8.09%	6.83%	6.83%	5.53%	11.06%
43	4.12%	8.24%	6.98%	6.98%	5.61%	11.23%
44	4.20%	8.40%	7.13%	7.13%	5.68%	11.37%
45	4.27%	8.55%	7.29%	7.29%	5.74%	11.48%
46	4.35%	8.69%	7.44%	7.44%	5.78%	11.55%
47	4.42%	8.83%	7.59%	7.59%	5.78%	11.56%
48	4.48%	8.97%	7.74%	7.74%	5.78%	11.56%
49	4.54%	9.08%	7.88%	7.88%	5.78%	11.56%
50	4.58%	9.17%	8.02%	8.02%	5.78%	11.56%
51	4.61%	9.23%	8.16%	8.16%	5.78%	11.56%
52	4.62%	9.24%	8.29%	8.29%	5.78%	11.56%
53	4.62%	9.24%	8.41%	8.41%	5.78%	11.56%
54	4.62%	9.24%	8.52%	8.52%	5.78%	11.56%
55	4.62%	9.24%	8.61%	8.61%	5.78%	11.56%
56	4.62%	9.24%	8.66%	8.66%	5.78%	11.56%
57	4.62%	9.24%	8.67%	8.67%	5.78%	11.56%
58	4.62%	9.24%	8.67%	8.67%	5.78%	11.56%
59	4.62%	9.24%	8.67%	8.67%	5.78%	11.56%
60	4.62%	9.24%	8.67%	8.67%	5.78%	11.56%

*\*For general members entering after age 60, the rate equals the rate at age 60. Likewise, for Safety members entering after age 50, the rate equals the rate at age 50.*

## Los Angeles County Employees Retirement Association

### Exhibit D-2: Normal Plus Cost-of-Living Member Contribution Rates

Entry Age	General				Safety	
	Plan A	Plan B	Plan C	Plan D	Plan A	Plan B
16	4.06%	5.56%	4.74%	4.63%	6.69%	8.73%
17	4.15%	5.70%	4.85%	4.74%	6.69%	8.73%
18	4.26%	5.82%	4.95%	4.84%	6.69%	8.73%
19	4.35%	5.95%	5.07%	4.96%	6.83%	8.92%
20	4.44%	6.09%	5.19%	5.07%	6.99%	9.12%
21	4.55%	6.22%	5.30%	5.18%	7.13%	9.33%
22	4.65%	6.35%	5.42%	5.30%	7.29%	9.54%
23	4.74%	6.50%	5.54%	5.42%	7.45%	9.75%
24	4.85%	6.65%	5.67%	5.54%	7.63%	9.96%
25	4.96%	6.79%	5.79%	5.66%	7.79%	10.18%
26	5.08%	6.94%	5.93%	5.79%	7.97%	10.42%
27	5.19%	7.10%	6.05%	5.92%	8.15%	10.65%
28	5.29%	7.26%	6.19%	6.05%	8.33%	10.89%
29	5.42%	7.42%	6.32%	6.18%	8.51%	11.14%
30	5.54%	7.59%	6.47%	6.33%	8.71%	11.38%
31	5.67%	7.76%	6.61%	6.46%	8.91%	11.65%
32	5.79%	7.93%	6.76%	6.61%	9.11%	11.92%
33	5.92%	8.11%	6.91%	6.75%	9.33%	12.18%
34	6.06%	8.29%	7.07%	6.91%	9.53%	12.46%
35	6.20%	8.48%	7.21%	7.05%	9.73%	12.72%
36	6.35%	8.67%	7.38%	7.21%	9.93%	12.98%
37	6.49%	8.87%	7.55%	7.38%	10.13%	13.26%
38	6.63%	9.07%	7.72%	7.55%	10.33%	13.50%
39	6.77%	9.27%	7.90%	7.72%	10.53%	13.75%
40	6.92%	9.46%	8.07%	7.89%	10.71%	14.00%
41	7.06%	9.67%	8.25%	8.07%	10.89%	14.25%
42	7.20%	9.87%	8.45%	8.26%	11.07%	14.47%
43	7.35%	10.05%	8.64%	8.44%	11.23%	14.70%
44	7.49%	10.24%	8.82%	8.63%	11.37%	14.88%
45	7.61%	10.43%	9.02%	8.82%	11.49%	15.02%
46	7.76%	10.60%	9.21%	9.00%	11.57%	15.11%
47	7.88%	10.77%	9.39%	9.18%	11.57%	15.13%
48	7.99%	10.94%	9.58%	9.36%	11.57%	15.13%
49	8.09%	11.07%	9.75%	9.53%	11.57%	15.13%
50	8.17%	11.18%	9.92%	9.70%	11.57%	15.13%
51	8.22%	11.26%	10.10%	9.87%	11.57%	15.13%
52	8.24%	11.27%	10.26%	10.03%	11.57%	15.13%
53	8.24%	11.27%	10.41%	10.17%	11.57%	15.13%
54	8.24%	11.27%	10.54%	10.31%	11.57%	15.13%
55	8.24%	11.27%	10.65%	10.42%	11.57%	15.13%
56	8.24%	11.27%	10.72%	10.48%	11.57%	15.13%
57	8.24%	11.27%	10.73%	10.49%	11.57%	15.13%
58	8.24%	11.27%	10.73%	10.49%	11.57%	15.13%
59	8.24%	11.27%	10.73%	10.49%	11.57%	15.13%
60	8.24%	11.27%	10.73%	10.49%	11.57%	15.13%

*\*For general members entering after age 60, the rate equals the rate at age 60. Likewise, for Safety members entering after age 50, the rate equals the rate at age 50.*

## Los Angeles County Employees Retirement Association

### Appendix E: Glossary

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The following definitions include excerpts from a list adopted by the major actuarial organizations in the United States. In some cases, the definitions have been modified for specific applicability to LACERA and include terms used exclusively by LACERA. Defined terms are capitalized throughout this Appendix.

<b>Accrued Benefit</b>	The amount of an individual's benefit (whether or not vested) as of a specific date, determined in accordance with the terms of a pension plan and based on compensation and service to that date.
<b>Actuarial Accrued Liability</b>	That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of pension plan benefits and expenses which is not provided for by future Normal Costs.
<b>Actuarial Assumptions</b>	Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement, and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; procedures used to determine the Actuarial Value of Assets; and other relevant items.
<b>Actuarial Gain (Loss)</b>	A measure of the difference between actual experience and that expected based on a set of Actuarial Assumptions during the period between two Actuarial Valuation dates, as determined in accordance with a particular Actuarial Cost Method.
<b>Actuarial Present Value</b>	The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of Actuarial Assumptions.
<b>Actuarial Valuation</b>	The determination, as of a valuation date, of the Normal Cost, Actuarial Accrued Liability, Actuarial Value of Assets, and related Actuarial Present Values for a pension plan.
<b>Actuarial Value of Assets</b>	The value of cash, investments and other property belonging to a pension plan, as used by the actuary for the purpose of an Actuarial Valuation.
<b>Actuarially Equivalent</b>	Of equal Actuarial Present Value, determined as of a given date with each value based on the same set of Actuarial Assumptions.
<b>Amortization Payment</b>	That portion of the pension plan contribution which is designed to pay interest on and to amortize the Unfunded Actuarial Accrued Liability.

<b>Contingency Reserve</b>	Reserves accumulated for future earning deficiencies, investment losses, and other contingencies. Additions include investment income and other revenues; deductions include investment expense, administrative expense, interest allocated to other reserves, funding the STAR Reserve, and distributions to the Contribution Credit Reserve. The Contingency Reserve is used to satisfy the California Government Code requirement for (31592 and 31592.2) LACERA to reserve 1% of the assets against earning deficiencies, investment losses, and other contingencies.
<b>County Contribution Credit Reserve</b>	The accumulated balance of the County's proportionate share of excess earnings as stipulated in Retirement System Funding Agreement between LACERA and the County. Additions include distributions from excess earning during the fiscal years ending 1994 through 1998 and related earnings. Deductions include payments, as the County authorizes, for future employer contributions due LACERA and for funding a portion of the Retiree Healthcare Program under the provisions of Internal Revenue Code 401(h).
<b>Employer Reserve</b>	The accumulation of employer contributions for future retirement benefit payments. Additions include contributions from employers and related earnings. Deductions include annuity payments to retired members and survivors, lump sum death benefit payments to member survivors, and supplemental disability payments.
<b>Entry Age Actuarial Cost Method</b>	A method under which the Actuarial Present Value of the Projected Benefits of each individual included in an Actuarial Valuation is allocated on a level basis over the earnings or service of the individual between entry age and assumed exit ages. The portion of this Actuarial Present Value allocated to a valuation year is called the Normal Cost. The portion of this Actuarial Present Value not provided for at a valuation date by the Actuarial Present Value of future Normal Costs is called the Actuarial Accrued Liability.
<b>Funded Ratio</b>	A measurement of the funded status of the system. The Funded Ratio is calculated by dividing the Valuation Assets by the Actuarial Accrued Liability. For example, a Funded Ratio of 90% indicates assets are 10% less than liabilities.
<b>Member Reserve</b>	The accumulation of member contributions. Additions include member contributions and related earnings. Deductions include annuity payments to retirees and refunds to members.

<b>Non-Valuation Reserves</b>	Reserves excluded from the calculation of contribution rates, including the Contingency Reserve, the STAR reserve, the County Contribution Credit Reserve, and any other reserves specifically excluded by the Board of Investments.
<b>Normal Cost</b>	That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method.
<b>Plan Year</b>	A twelve-month period beginning July 1 and ending June 30.
<b>Projected Benefits</b>	Those pension plan benefit amounts which are expected to be paid at various future times under a particular set of Actuarial Assumptions, taking into account such items as the effect of advancement in age and past and anticipated future compensation and service credits.
<b>STAR Reserve</b>	Reserves accumulated for the payment of cost-of-living benefits as defined in California Government Code Section 31874.3.
<b>Supplemental Targeted Adjustment for Retirees (STAR) Benefits</b>	Supplemental cost-of-living payments to retired members to restore purchasing power at a specified percentage level, as described in California Government Code Section 31874.3
<b>Surplus Funding</b>	The excess, if any, of the Actuarial Value of Assets over the Actuarial Accrued Liability. Standard actuarial terminology defines this as the "Funding Excess". LACERA uses the term "Surplus Funding".
<b>Unfunded Actuarial Accrued Liability</b>	The excess, if any, of the Actuarial Accrued Liability over the Actuarial Value of Assets.
<b>Valuation Date</b>	The date upon which the Normal Cost, Actuarial Accrued Liability, and Actuarial Value of Assets are determined. Generally, the Valuation Date will coincide with the ending of a Plan Year.
<b>Valuation Reserves</b>	All reserves excluding the Non-Valuation Reserves.